

AMERICAN ARTISAN and Hardware Record

VOL. 78. No. 9.

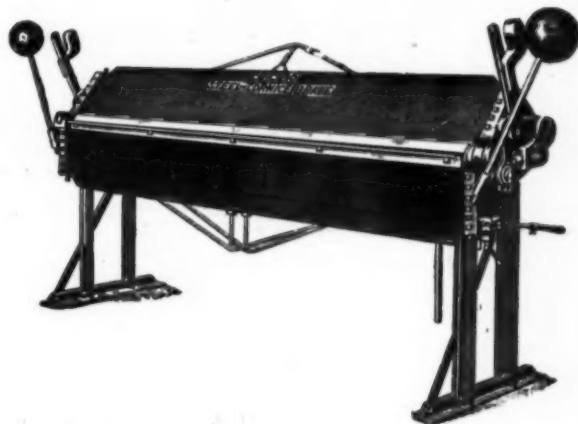
620 SOUTH MICHIGAN AVENUE, CHICAGO, AUGUST 30, 1919.

\$2.00 Per Year.

CHICAGO *STEEL* CORNICE BRAKES

Best By Test

FOR the past eighteen years we have served thousands of customers, and their satisfaction is the cause of our present success. Today we are the largest manufacturers of **HAND and POWER BENDING BRAKES**. We make the most complete and highly developed line and are able to serve you no matter what your requirements may be. We can alter or reconstruct brakes listed in our catalog or design special brakes for any class of bending. With machines suited to your exact needs you can turn out the best work and save much valuable time. **CHICAGO STEEL CORNICE BRAKES** are superior brakes. What is your requirement?



Hand or Power Operated

THROUGHOUT the entire construction of all **CHICAGO BRAKES Steel** is used. It is three times as strong as cast iron. It affords a big saving in weight, and because of its strength proves much more durable.

CHICAGO STEEL BRAKES are of fully patented construction. An important feature consists of an arrangement of heavy steel plates placed in such positions that the strain is directly against the edges of the various plates. This produces a condition that makes for the greatest strength and accuracy. There are numerous other features that you can at once recognize by referring to our catalog. **CHICAGO STEEL BRAKES** because of their superiority have become the accepted standard over the old style wood and cast iron machines.

Let us tell you more about them. We are ready to give you special information on any style and size brake and will be glad to explain the different features.

Our catalog No. 15 lists our complete line—Write for it.

Write Today To

DREIS & KRUMP MANUFACTURING CO.

2915 South Halsted Street, CHICAGO, ILLINOIS

MAHONING HEATERS

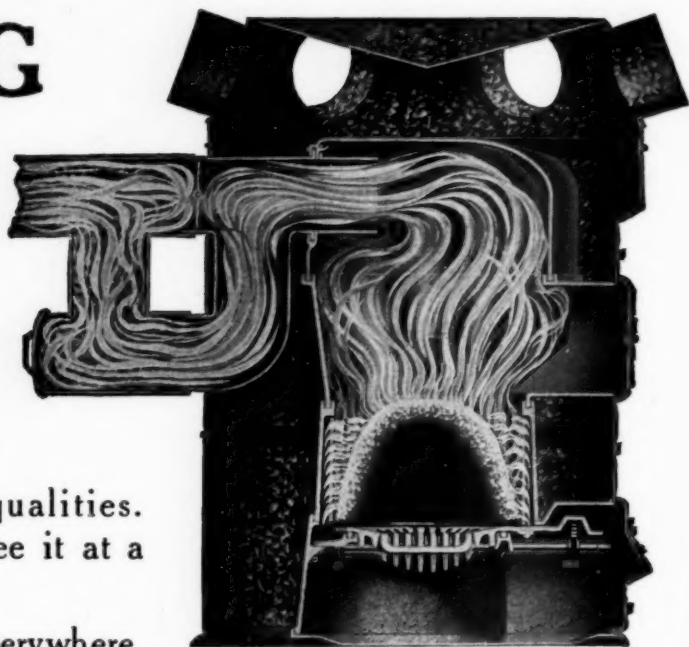
Sell Themselves

So many superior qualities are involved in **MAHONING** construction that to tell of one would slight others equally as important.

No need to *talk* Mahoning qualities. *Show* your customer,—he will see it at a glance.

We want good live dealers everywhere, and offer a tempting proposition.

A style and size for every purpose.



MAHONING TYPE "C"

Illustration shows quite clearly the combustion as it takes place in the Mahoning system. Note how the admission of air through the slots in the firepot causes combustion to take place all around the outside of the fire. The hottest part of the flame is in direct contact with the outside surface of the heater where the radiation of heat takes place. Only one of the features that have made the Mahoning famous from coast to coast.

The MAHONING FOUNDRY CO.
YOUNGSTOWN, OHIO

A Mammoth Plant With a Mammoth Production

FRONT RANK

TRADE NAME

REGISTERED

The Steel Furnace that is positively *gas-tight*, because it's *made right*.

Made of tested metal, cold-riveted together. No direct draft to warp and buckle. Stays in order.

If you're not handling the **FRONT RANK** you, your customers and we are all losing money. Write for illustrated literature and prices.

FRONT RANK

Steel Furnace

is fool-proof. Gets more heat value out of the fuel used; because its radiating surface is greater, and more of the heat generated in burning the coal is extracted before the smoke and gases are passed on up the flue.

Haynes-Langenberg Mfg. Co.
4058 Forest Park Blvd. St. Louis, Mo.



MADE MARK REGISTERED.

ESTABLISHED 1880

Representative of

The Hardware, Stove,
Sheet Metal, and Warm
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lating Interests

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Increasing Production Is Needful.

THE FEVERISH CAMPAIGN against profiteering and the complaints from all quarters against the high cost of living have done little to unravel the intricacies of the situation. They furnish material for newspaper articles and give the necessary stimulus of sensation to the headline writers. To some extent, they intensify rather than clear the confusion in the public mind. Cool-headed students of the present state of affairs look elsewhere for a solution of the problems which are vexing the nation. Not reduction of wages so much as the increase of individual production is believed by many to be a way out of the tangle of difficulties. To bring about this desirable result, the foremost requisite is better workmanship which necessarily involves more skill—and this, in turn, presupposes industrial training. One of the most competent authorities on the subject, Colonel Arthur Woods, assistant to the Secretary of War, declares that American factories are today using six million or more workers to do what four and one half million men could do as well if they were fairly trained. This means that the American manufacturers are paying the wages of one million and a half workers who are really adding nothing to the total output of the industrial system. In the manufacturing section of New England,—and a few portions of the United States are more important in the production of our daily necessities,—factory experts have stated that the factories are not more than 60 per cent efficient in output, merely for want of more skilled man power. This does not compare very well with a pre-war Germany in which individual industrial training was so successfully operated that 65 per cent of the managerial and technical force consisted of men who had started work as unskilled or semi-skilled labor.

In aggravation of the high cost of living, the entire question has been brought to a head just now by the large numbers of soldiers returning to civilian life from the military service. Many of these men went to war unskilled workers, but because of their experience have come back with greater ambitions and larger vision. They have the psychological start for better things. They have the desire to improve their condition and their earning power. But they have neither the skill, nor the means for developing the skill, without which their ambitions can not possibly be realized. They must have industrial training and on a sufficiently large scale to offer an opportunity for advancement to every man who wants one and deserves it. These men must earn a living wage while

they are learning, and must be taught intensively enough so that in a short time they will be able to realize their ambitions and to increase their earning powers.

That greater production means lower prices is axiomatic. That this result can be accomplished with those very men who are at present classed as unskilled laborers is abundantly proved by the experience of a number of factory owners. The superintendent of one of the biggest metal working establishments in the country, states that mechanics who had been with them for two years were given one week of training, as a result of which they doubled their individual production. In another plant a worker returning from the training department by eleven o'clock did what has been estimated formerly to be a day's work. In a shoe factory in Brooklyn, sixty soldiers were recently employed who had had no previous training in shoe production, and who were taken on with the avowed intention of being put through the training course in order to be taught their trade. The men started at fifteen dollars per week and after a training varying from three to six weeks some of these men are earning as high as seventy dollars a week.

Bearing in mind these random illustrations of the possibilities of industrial training, what is the country doing today to accomplish the same result on a larger basis? The answer can be given briefly without noticeable inaccuracy. It is doing just exactly nothing at all. The United States spends seven hundred million dollars annually on general education. It spends five thousand dollars of public money on anyone who has sufficient means to live without wage-earning in the years between sixteen and twenty-one. But it seldom spends a single dollar on making a mechanic. Where millions are spent for a few thousand professionals, nothing is spent for the millions who produce our necessities. So long as this condition persists, no remedy for the high cost of living can be successful because it is only by going to this fundamental feature of the problem that anything can be accomplished.

What industrial training means in terms of advancement for the workers of the United States can scarcely be over-estimated. A great majority of our 10,000,000 factory workers confront a changeless task that they do not really comprehend and will never get a chance to master or escape. It has recently been said that "labor unrest at this time is an effort to secure a recognition of personality." This is absolutely fundamental to the solution of our industrial and labor problems. High wages alone will get us nowhere,

because the monotony of a routine task and the lack of opportunity for advancement will not be replaced by a mere increase in the weekly payroll. Men must be given every reasonable chance not only to improve their wages but actually to improve their working conditions and express their personal ambitions by having an opportunity to graduate from the less skilled and less interesting to the more skilled and more interesting type of work.

Nor will this be a difficult matter once the facts are clearly presented to America's industrial leaders, because not only is future productivity increased but the men more than pay for themselves at the same time that they are learning. More and more factories are beginning to discover that raising the level of skill of their workers is a paying investment which makes for contentment among their men, which produces leaders to take charge of the work requiring skill and intelligence, and which actually increases the profits and dividends by raising the general level of production to a higher plane, by means of increased efficiency instead of increased expenditure. Labor, on the other hand, is responding eagerly to this idea because it means increased earning power to the individual worker, independence and better education. It makes for pride in his work and contentment with his prospects for every laborer who is thus given an opportunity to better his condition and improve his status as his skill increases. The public, finally, sees in this a fundamental approach toward solving the high cost of living, and completes the tripartite National approval on which the success of the plan depends.

IN THE WAKE of every great war have followed profound changes in the opinions and actions of the people. Out of the tragic European conflict has developed a spirit of unrest. Dissatisfaction is manifested on all sides. The vanquished are not satisfied because they were defeated after having been promised victory. The victors are not satisfied because, considering their sacrifices in blood and treasure, they do not consider themselves sufficiently remunerated by the exactions demanded of the Central Powers. The working classes, having received during the war greater remuneration than they ever expected to receive for similar services rendered, now think that, with the return of peace, they should be even better cared for than they were during hostilities. People, incapable of self-government, have had their heads turned by the idealistic preachments as to their rights.

The fact that all the people of the world must be governed by somebody, seems, for the time being, to be lost sight of. A great mass of the people seem to think that self-government means no government. It would be impossible for a great number of people to be assembled together without restraint of some kind upon their individual actions. Democracy, as taught by the new apostles of self-government, is sadly misunderstood. There can be no such thing as self-government, as some people define the same. In a pure democracy some one must be selected by the people themselves to administer the laws and to look after the welfare of the body of the people. Some govern-

ments are despotic, others liberal or democratic, but they all govern.

The sooner people everywhere understand these facts, and that they owe allegiance to the government under which they dwell, the better it will be for everybody. If civilization is not to disappear, the right to "life, liberty and the pursuit of happiness," which includes the right to acquire and hold property—the right to enjoy the fruits of one's labor—must be recognized as the foundation stone of any governmental structure anywhere erected. These rights can not be guaranteed to, or possessed by, the individual unless the individual is willing to accept and abide by these facts.

Furthermore, economy and thrift must be practiced, if either individual or national prosperity is to be assured. The conditions governing modern life are so complex that, if all the people of the nation become extravagant in their habits, so extravagant, in fact, that they live far beyond their means, and are ever in debt, instead of laying something by for a rainy day, disaster must, in the end, overtake them. The wild orgy of expenditures indulged in by our government, during the war, has turned the heads not only of capitalists, but also of wage-earners. The result is, an era of extravagance heretofore unequalled in America, which will, sooner or later, end disastrously. And, in this extravagance, history is again repeating itself.

THE FORMATION of cliques in an organization or business club lessens its value to the members. The more freely merchants mingle with the men of their trade and with dealers in other lines, the more will they benefit from the exchange of ideas. Progress is hindered by the spirit of clannishness. India, for example, is a backward country because of this very thing. At the present time there are nearly two thousand Brahman castes alone, according to the estimate of Dr. Maurice Bloomfield, Professor of Sanskrit in Johns Hopkins University. He informs us that in the matter of food and intermarriage all castes are now completely shut off from one another. A tailor may not invite his shoemaker neighbor to share his humble fare. The son of the shoemaker may not marry the barber's daughter.

In certain parts of India fisherfolk who knit the meshes of their nets from right to left may not intermarry with them that knit from left to right. In southern Bengal there is no intercourse between potters who turn their wheels a-sitting and make small pots and them that stand up for the making of large pots. A certain class of dairymen who make butter from unboiled milk have been excluded from the caste and may not marry the daughters of milkmen who churn upon more orthodox principles. Thus Hindu society is split into infinitely small divisions, each holding itself aloof from the other, each engaged in making its exclusiveness as complete as possible.

Business in America is a network of interlacing interests. The problems of the shoe dealer and the grocer are not essentially different from those of the hardware retailer. The underlying principles of

salesmanship are the same for every branch of distribution. Neighborhood associations of merchants are organized with the recognition of this fact in mind. City, state, and national chambers of commerce are formed for the purpose of developing business through cooperation. The caste system is fatal to success—whether it be in a club, a small community, or a national organization.

RANDOM NOTES AND SKETCHES.

By Sidney Arnold.

This week I have been more than usually fortunate in visits from friends whose coming adds to the brightness of life. Henry E. Schwab, Vice-president and Treasurer, R. J. Schwab and Sons Company, Milwaukee, Wisconsin, found time to come in for a few minutes' chat, and I enjoyed his good-natured smile.

* * *

Fresh from a coast to coast trip, my friend H. W. Sigrist of the Modern Way Furnace Company, Fort Wayne, Indiana, called to see me on his way home this week.

* * *

My friend Anthony L. Castle, vice-president Channon Emery Stove Company, Quincy, Illinois, paid me a pleasant visit the other day.

* * *

Paul L. Biersach, secretary Master Sheet Metal Contractors' Association of Wisconsin, Milwaukee, Wisconsin, came into my office this week and put me in a glow of good feeling by his charming friendliness.

* * *

Be sure of your facts in advance of any statements you may make, advises my friend Raymond Marsh of Chicago, Illinois, Secretary of the American Washing Machine Manufacturers' Association. He cites an example of the embarrassments likely to result from neglect of this precaution, as follows:

An evangelist who was conducting nightly services announced that on the following evening he would speak on the subject of "Liars." He advised his hearers to read in advance the seventeenth chapter of Mark.

The next night he arose and said: "I am going to preach on 'Liars' to-night and I would like to know how many read the chapter I suggested." A hundred hands were upraised.

"Now," he said, "you are the very persons I want to talk to—there isn't any seventeenth chapter of Mark."

* * *

Sometimes sympathy is misplaced, says my friend, Frank E. Ederle of Grand Rapids, Michigan, secretary of the Michigan Sheet Metal Contractors' Association. He gives an example in the case of the two Browns in the village, both fishermen. One lost his wife and the other his boat at about the same time.

The vicar's wife called, as she supposed, on the widower, but really upon the Brown whose boat had gone down.

"I am sorry to hear of your great loss," she said.

"Oh, it ain't much matter," was the philosophical reply, "she wasn't up to much."

"Indeed!" said the surprised lady.

"Yes," continued Brown, "she was a rickety old thing. I offered her to my mate, but he wouldn't have her. I've had my eye on another for some time."

And then the outraged lady fled.

* * *

A Kansas newspaper offered a prize for the best essay on Success. It was won by Mrs. A. J. Stanley, whose brief essay, reprinted herewith, is the distilled essence of a whole library of writings on the subject. It reads as follows:

He has achieved success who has lived well, laughed often and loved much; who has gained the respect of intelligent men, and the love of little children; who has filled his niche and accomplished his task; who has left the world better than he found it whether by an improved poppy, a perfect poem, or a rescued soul; who has never lacked appreciation of earth's fine beauty, or failed to express it; who has always looked for the best in others and given the best he had; whose life was an inspiration, his memory a benediction.

* * *

I have no grudge against lawyers. Indeed, I number many friends among them. There is, therefore, no animus in my repeating the following story related to me by my friend George R. Carter of Cope-Swift Company, Incorporated, Detroit, Michigan:

The lawyer was cross-examining a witness to a robbery.

"When did the robbery take place?" he asked.

"I think—" began the witness.

"We don't care what you think, sir. We want to know what you know."

"Then if you don't want to know what I think, I may as well leave the stand. I can't talk without thinking. I'm not a lawyer."

* * *

No vending machine can ever take the place of the warm-blooded salesman who greets the customer with a smile and actually takes an interest in selling him what he needs. How pleasantly he affects the customer is set forth in the subjoined lines:

The Good Salesman.

He calls my name when I go in;
No other shop my trade can win.

He nods and bids the time o' day
And smiles: "Be with you right away."
If he's delayed he calls: "Old man,
Be with you just as soon's I can!"

Some others in his fix would think:
"What does he take me for—that gink?
He knows, if he has any sense,
He has no grounds to take offense."

Of course, I know; but just the same
It eases things to hear my name,
And know that I am in his mind
And that he isn't deaf or blind.

Naught else in all the world will peeve
A customer—so I believe—
Like giving him the stony stare,
As if you knew not he was there.

If set at ease when he comes in,
With gladsome hail and cheery grin,
He'll wait in patience till you're through
With what your duty called you to.

I'm greeted soon as I go in;
No other shop my trade can win!

UP TO THE MINUTE NEWS SIFTINGS

The Sunray Stove Company, Delaware, Ohio, is taking bids for two plant additions, 85x100 feet and 43x65 feet, to cost \$25,000.

CALLS AN IMPORTANT CONFERENCE.

For the purpose of coordinated action with reference to the industrial situation, the Illinois Manufacturers' Association, Fort Dearborn Bank Building, Chicago, Illinois, has called a conference of all manufacturers, wholesalers, and retailers to be held September 8 and 9, 1919, in the Congress Hotel, Chicago, Illinois. In order to make sure of reaching everyone concerned, the Association has secured the names and addresses of secretaries of various business associations by calling upon trade journals for assistance in the matter.

Trade and industrial associations in every line have been invited to appoint delegates, and to participate in what is believed will be a meeting of moment, inasmuch as it will enable business to present concretely its attitude on some of the questions now before the lawmakers at Washington, and some of the proposals of a revolutionary nature that have been presented from various sources in the past few months.

Representation is to be given at the conference not only to business, but to the farming interests, since it is pointed out that agriculture, after all, is one of the greatest businesses of the country. The farmer has his capital invested in land, he is an employer of labor, and he is concerned with the maintenance of conditions which will permit him to obtain a fair return upon his investment and his management of his enterprise.

Leaders of organized labor have also been invited to talk, and to state where the demands of workers are going to stop.

Some of the subjects which it has been suggested be discussed at the conference are the following:

Participation in private business on the part of the Federal government.

Nationalization of industry.

Influence of exports on prices and production.

Possibilities of increasing production.

The relation of the United States to the rehabilitation of industry in Europe.

Stabilization and guarantee of contracts.

Definition of profiteering.

The attitude of employing farmers and manufacturers to labor.

Adjustment between property rights and community interests.

Participation of labor in the management of industry.

Increasing the purchasing power of the dollar.

Distribution of the war debt.

Governmental price fixing.

The Plumb plan.

The solidarity of farming and business interests.

APPEALS AGAINST EXTRAVAGANCE.

An appeal to War Savings Societies, in factories, and all other industrial organizations, to put forth maximum efforts to cut down the orgy of extravagant buying now going on in America and to speed up production as a means of reducing the cost of living, has been made by William Mather Lewis, Director of the Savings Division of the Treasury Department.

Mr. Lewis has just returned to Washington from a tour of a number of the federal reserve districts. He declares that the questions of prices is disregarded, almost, in the demand the people are making for commodities. He held a conference in Boston with the result that chairman and chairwomen of Savings Societies all over the state are cooperating with the Food Administrator of Massachusetts, and in some cases acting as local representatives of the Food Administration.

There are 160,000 Savings Societies active in the United States. These are especially numerous in the industrial localities and the total membership of the societies aggregate over six million persons. Concerted action on the part of these societies to buy carefully themselves, and to impress upon their fellows the vital need for efficient work and for moderate consumption, and for the regular saving and safe investment of a portion of their earnings would materially check the high competition in buying and permit prices to decline, Mr. Lewis asserted.

Many of the societies already are actively engaged in carrying out the "work and save" plan urged by Governor W. P. G. Harding of the Federal Reserve Board.

"Every sound analysis of the present price situation," said Mr. Lewis, "leads back to confirmation of Governor Harding's decision that no solution of high living costs can be reached until the country shakes off its present spending intoxication and settles down to demanding the receipt of a dollar's worth of food or material, measured by the labor or effort required to obtain that dollar."

"One great trouble is that millions of persons are not only spending from their earnings, but from their savings of the past two years. Liberty Bonds and other securities accumulated by the most worthy patriotic sacrifice during the war, are being cashed at a loss to purchase luxuries at prices exorbitant even for luxuries.

"It is not essential that we return to the extremes of economy that we practiced during the war, but it is essential that we keep a firm hold on the savings

accumulated—not only as a matter of selfish profit, but as a factor in bringing prices down. And it is absolutely necessary to work regularly and efficiently in order to produce and distribute the largest possible volume of commodities and to exercise reasonable economies in order that money, goods and services may satisfy the demand for necessities rather than indulgence in luxuries.

"War Savings Societies have unbounded opportunities for national service along these lines. They can do much by precept and example. It is in their power to increase production and to check waste. And it is much to their advantage to do this. By denying themselves luxuries now, and by saving and buying safe securities, the people can, after a return to normal conditions, enjoy more and greater luxuries and comforts. Every individual can help materially by buying War Savings Stamps—and keeping them."

BECOMES TRAVELING REPRESENTATIVE FOR BORDEN STOVE COMPANY.

The fine spirit which prevails in the management of the Borden Stove Company, Philadelphia, Pennsylvania, is exemplified in a letter to the trade announcing the appointment of William J. Luckey as traveling representative in Pennsylvania. Mr. Luckey succeeds R. W. Millie in that sales territory. The Company states that Mr. Millie leaves its employ to engage in another line of business and that he carries with him its best wishes in his new undertaking. At the same time it bespeaks for Mr. Luckey the same courteous treatment and liberal patronage which the trade extended to his predecessor the past four years.

ESTABLISHES HIGH STANDARDS.

When an industry, by the concerted effort of its members evidences a determination to establish a high standard of quality, for its product, it is but natural that considerable interest should be aroused. But when such determination is expressed by a body of men representing so many distinct organizations as those composing the great Malleable Industry, the importance and difficulty of the task is at once recognized.

This in brief was the responsibility which the American Malleable Castings Association assumed at the time of its organization. And its recent announcement of the course pursued and the results obtained is an interesting commentary on its most commendable activities.

Aside from the various laboratories of its members the Association maintained at Albany, Ohio, a Research Department for investigation and experiment, and for the testing and analysis of the daily output of each member of the Association. Impartial tests were made and the results together with direction for improvement, where the need was indicated, were forwarded to the respective members.

So successful has the work of the Association proved that today it is credited with bringing all its members to a high average quality in their product known as "Malleable Castings."

Having accomplished that result, the Association it

is said will continue these daily tests and analysis for the purpose of grading the product of each member. When a member's product has daily met the requirements of the prescribed standard for a period of three months a "certificate of quality" will be issued to that member, who may designate his output as "Certified" Malleable Castings. These certificates will be renewed quarterly where the quality required is maintained.

At the same time the Association is issuing a booklet on Malleable Iron and its production which will prove very interesting to those who desire a better understanding of the methods employed in the improvement of Malleable. The book can be obtained by any of our readers without charge by writing to the American Malleable Castings Association, 1900 Euclid Building, Cleveland, Ohio.

HELPS DEALERS INCREASE BUSINESS.

The Detroit Vapor Stove Company, Detroit, Michigan, is well known for its national advertising and its cooperation with dealers to help them increase their oil stove business. The Red Star Detroit Vapor Oil Stove burns kerosene, gasoline, or distillate without the aid of wicks or asbestos rings. It has a heavy, patented, double-ring-flame burner which generates its own gas from the cheapest grade of oil. It is said to produce an intense heat. All of the heat units of the fuel are vaporized and used thus leaving no trace of odor or smoke. The manufacturers state that one gallon of fuel gives nineteen hours of good cooking heat. Dealers who are interested should write to The Detroit Vapor Stove Company of Detroit, Michigan, for details of its exclusive agency proposition.

IS A SAFEGUARD AGAINST FIRES.

It is generally known that a large percentage of fires are preventable by the use of fire preventing pipes, thimbles, flue caps, roofing, etc. In the accompanying illustration is the Safety Interlocking Stove and Warm Air Heater Pipe made by the Safety Interlocking Stove Pipe Company of Mount Pleasant, Iowa. When used in connection with the Company's



Safety Interlocking Stove and Warm Air Heater Pipe, Made by the Safety Interlocking Stove Pipe Company, Mount Pleasant, Iowa.

safety flue thimble, cap, and elbow, the home or building has taken a great step in the direction of fire prevention. If properly taken care of, these pipes, thimbles and caps will last a very long time. They come in various sizes and the Company will manufacture them according to specifications at reasonable prices. The Safety Interlocking Stove Pipe Company of Mount Pleasant, Iowa, is pleased to give full particulars and circulars to anyone writing for them and dealers and installers are advised to take advantage of this opportunity.

THE WEEK'S HARDWARE RECORD

Of Interest to Manufacturer, Jobber and Retailer

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 38 to 43 inclusive.

The Forest City Bit and Tool Company, Rockford, Illinois, is adding to its plant at an estimated cost of \$10,000.

The National Lock Company of Rockford, Illinois, is erecting a six story addition, 80x264 feet, that is estimated to cost \$250,000.

The Penick Hughes Company, wholesale hardware dealers at Stamford, Texas, have been incorporated with a capital of from \$100,000 to \$300,000.

The S. and S. Razor Corporation, 35 West 125th Street, New York City, has been incorporated with a capital of \$21,000 by A. E. Shepard, H. and D. Schaefer.

The Gates Nichols Hardware Company, Tulsa, Oklahoma, has been incorporated for \$100,000. The incorporators are W. F. Nichols, F. E. Gates and W. E. Gates.

Kellogg and Lawrence, Katonah, New York, have been incorporated to manufacture hardware, etc., with a capital of \$50,000. The incorporators are H. W. Kellogg, A. Elliot and C. Fayette Lawrence.

The Grinnell Washing Machine Company, Grinnell, Iowa, has been incorporated for \$250,000 to manufacture washing machines and other devices. A. C. Lyon is president; Fred J. Whinery, vice-president, and J. I. Fellows, treasurer.

N. J. Clarke, formerly vice-president and secretary of the Upson Nut Company, Cleveland, Ohio, has taken a five year lease on the property at the foot of East 63rd Street. The name of the Company is now the Lake Erie Bolt and Nut Company with Mr. Clarke as president. The plant will be operated for the manufacture of bolts and nuts together with a rolling mill.

MAKES PRELIMINARY ANNOUNCEMENT OF PLANS FOR CONVENTION.

For nineteen consecutive years, the Pennsylvania and Atlantic Seaboard Hardware Association has held an exhibition of hardware in connection with its annual convention with the view of educating the hardware dealers and popularizing the exhibition feature.

These exhibitions at first were chiefly of educational value to the hardware dealers, but soon became of great commercial value, and today comprise the greatest hardware market of the United States.

The hardware dealers attend with the purpose of

buying, and the manufacturers and jobbers alike make generous preparation in their exhibition to market their products.

The exhibitors are practically all of the largest and best known manufacturers and jobbers of hardware, house furnishings, cutlery, tools, electrical supplies, electrical appliances, stoves and kitchen ware, plumbing supplies, factory supplies, rubber goods, novelties, juvenile goods, automobile accessories, sporting goods, roofing, railway supplies, cordage, paints, varnishes, glass, brushes, seeds, farming tools, farming implements, wire fencing, tractors and gasoline engines.

The next exhibition will be held February 10, 11, 12, and 13, 1919, in the Philadelphia Commercial Museum, a building specially designed for such purposes, the largest of its kind in America. Well lighted, heated and ventilated, it will accommodate 400 exhibitors. It is located almost in the heart of the great city of Philadelphia, Pennsylvania, second seaport in the United States.

Inquiries are coming in daily from manufacturers regarding space for their exhibit, and the consensus among manufacturers, jobbers and exporters is that the buying record of the year 1920 will be the largest in history. So that the greatest preparation is being made to supply the demand.

WASHING MACHINE MANUFACTURERS WILL MEET IN CHICAGO.

The labor situation, conditions of the trade, and plans for improving the business of its members are among the topics to be discussed by the American Washing Machine Manufacturers' Association at a meeting September 10 and 11, 1919, in the Hotel Sherman, Chicago, Illinois. The organization is progressive and alert to everything which can be used for the betterment of the industry and has already accomplished much for the collective welfare of its members.

DISCONTENT NEEDS REGULATION.

In every society and in every class there are contented men, nobly unselfish men; those who do good work for good work's sake, treating reward as a secondary consideration bound to adjust itself sooner or later and still secondary if it fails to do so. These are the salt of the earth; and to them is due such moral and spiritual progress as the world has made.

But discontent rightly used is a force for progress. It stimulates emulation. To say that necessity is the mother of invention is only another way of putting the fact. Enlightened self-interest is enlightened because it sees that the success of one is bound up in the success of all.

PRINCIPLES AND EXAMPLES OF GOOD WINDOW DISPLAYS.

MAKES GOOD USE OF MANUFACTURERS' POSTERS IN WINDOW DISPLAY.

This is preeminently the day of cooperation. Through their various organizations, business men in all lines of industry are finding by practical experience that better results are obtained by working together than by going it alone. They have become convinced of their interdependence. Commerce is so complex in its relations that the interest of one merchant or manufacturer is, in a very true sense, the interest of all merchants and manufacturers. Production is useless without distribution. On the other hand, distribu-

Deutz and Brother, Laredo, Texas, in their commendable use of the manufacturers' posters and cut-outs in their window display of percolators shown in the accompanying illustration. It is a fact buttressed with a wealth of experience that illustrations showing the use of a commodity constitute a powerful adjunct to the sale of an article. In the window display under discussion, the cut-outs depict the percolators in use at the table. They show the ease with which these convenient utensils may be employed. They carry the idea of neatness, convenience, attractive appearance, and simplicity of operation. A. Deutz and Brother give evidence of good judgment in displaying



Window Display of Universal Percolators, Arranged by A. Deutz and Brother, Laredo, Texas.

tion can not function without production. The manufacturer and jobber are necessary to the prosperity of the retailer. Conversely, the retailer is essential to the welfare of the manufacturer and jobber.

The time is definitely of the past when the chief concern of the producer was to unload his goods upon the dealer and pay no more attention to them. Today, the producer recognizes that his income depends upon the ultimate marketing of the things which he manufactures. It is a simple logic which teaches that the more goods of a particular brand which the retailer sells with satisfaction and service to the consumer the greater will be the demand and the larger the volume of production. Consequently, the foremost manufacturers in every department of industry have adopted the policy of close cooperation with the retail distributor of their products. In pursuance of this object, they have devised strong advertising and selling helps for the furtherance of the sales of their commodity to the consumer. The wise retailer takes full advantage of these various aids, as in the case of A.

nationally advertised, trade-marked percolators in this window exhibit. They profit by the established reputation of the manufacturers for the reason that it is much less difficult to sell articles that are well known to the public than to merchandise goods of comparatively unknown quality. The returns from this window display were of a very encouraging nature and fully justified the care and skill expended in its preparation.

DISCONTINUES SELLING AT RETAIL.

So great has been the increase of their jobbing business that Hutsinpillar and Sheridan have found it expedient to discontinue the retail selling of hardware at Ironton, Ohio, and devote their entire energy to carrying on the wholesale business in hardware and mill supplies.

It is only a narrow man who is hidebound and strenuously opinionative.

REVIEWS INDUSTRIAL SITUATION.

In a letter sent out to the members of his organization, Murray Sargent of the Industrial Cooperation Service, American Hardware Manufacturers' Association, gives the following review of the economic situation with special reference to the need for closer coordination of policies and efforts:

"Perhaps the most striking feature of the late war from a manufacturer's view point was the rapid progress made by industries generally in bringing conditions of manufacturing and distributing to certain standards. Progress was largely centered along the lines of saving material, labor, power, fuel and transportation as a part of the winning of the war. The remarkable achievements by industries along these lines were the direct result of cooperation.

"With the coming of the Armistice, and later the signing of Peace the compelling motive for cooperation among manufacturers in each industry disappeared. We must recognize this, but we must also recognize the fact that the reasons for jointly considering the problems which face the manufacturer today, though now less apparent, are vital both from a selfish stand point and from the stand point of the public good. A further point that we must recognize is that peace time cooperation by a group of manufacturers in an industry which takes into consideration the welfare of manufacturers and fails to take into consideration the welfare of the public is unsound from an economic stand point and should not be attempted whatever the legal aspects of that form of cooperation may be.

"Even an occasional interchange of views and of information by a group of manufacturers of similar products may be helpful in solving some of the many problems which crowd upon the producer in these uncertain times. It is the purpose of this letter to bring your attention to some of these problems which seem to require serious consideration by the industry or industries of which you are a part.

"(a) Labor.

"Sir Alfred Booth, Chairman of the Cunard and Associated Steamship Lines, who presided at the most important conference between Capital and Labor which ever took place in England, said in New York, on June 5th:

"First: Employers of every class must organize themselves in associations, dealing with labor affairs exclusively, with an expert secretarial and there should also be National Federations of the local associations. There are three reasons for this:

"To prevent the prehistoric employer from putting the fat in the fire.

"To prevent the weak employer from letting you down.

"To enable employers to meet organized labor on an equal footing without delay."

"Second: You must conduct your negotiations in such a way that if a strike occurs public opinion will be on your side."

"(b) Standardization of products, including conservation.

"(c) Revise and make uniform material standards.

"(d) Contract forms standardization.

"(e) Adopt uniform cash discounts and uniform terms for it and uniform terms of sale.

"(f) Returned goods.

"(g) Catalogue allowances.

"(h) Research work in cooperation with the Bureau of Standards at Washington.

"(i) The study of costs.

"(j) Industry advertising.

"(k) Statistical information showing monthly volume (domestic and export), and unfilled orders.

"In a general letter of this character it is not possible to give more than an outline of the subjects, particularly as varying conditions in different industries make the application of a more detailed outline uncertain. The Industrial Cooperation Committee asks first your serious consideration of the points enumerated, and second your presence at meetings of your industries which will be called in the near future to determine the advisability of appointing committees or representatives to study and develop plans for cooperative action. One entire session of the October Atlantic City Convention of the Association will be given to consideration of industrial cooperative activities. Your committee needs the help and guidance of your company through its executives and your committee feel that in return your executives by attending will take part in an exceptionally profitable session, further details of which will be sent to you later."

NAIL BIN ELIMINATES WASTE.

This is the "Eclipse" All-Steel Nail Bin, made by The Wellston Manufacturing Company, Wellston, Ohio. As its name indicates, each section is made of steel and each revolves independently of the others on full metallic ball bearings. It is said that even

when loaded to capacity, a light touch will turn it in either direction. It has a durable cast stem, solidly molded into a broad base which insures substantiality. It has a capacity of one keg per bin and will be greatly appreciated by any merchant who sells nails.



"Eclipse" All-Steel Nail Bin,
Made by The Wellston
Manufacturing Company,
Wellston, Ohio.

The Wellston Manufacturing Company maintains a service department for the aid of those who need metal furniture of a special nature and dealers should feel free to write for any information they desire. The Company publishes a catalogue which describes and illustrates sectional metal revolving devices of all kinds which are particularly designed to modernize the hardware store and save labor. A special discount sheet is also published which shows quotations to the hardware trade. Dealers should write to The Wellston Manufacturing Company of Wellston, Ohio, for catalogue and discount sheet.

Although The Wellston Manufacturing Company has an extensive and unusually well-equipped establishment, the business has grown to such a degree that it has been found necessary in the new organization under the management of Mr. I. W. Warden to make arrangements for building two additions to take care of the increased trade in revolving bins. One of the additions is to be 100 x 40 feet and the other 120 x 40 feet. The Company's policy of painstaking and intelligent service to its customers is the chief factor in the development of its business.

HARDWARE CLUB OF CHICAGO ASKS COOPERATION FOR FIELD DAY.

In order to make a proper showing for its Annual Field Day and Outing, to be held September 3, 1919, in Wing Park, Elgin, Illinois, the Hardware Club of Chicago asks the cooperation of all its members in the management of the affair. The entire Club is requested to constitute itself a Committee on Entertainment so that everyone may enjoy the day to the utmost.

The journey to Elgin is to be made by automobiles. Every member who owns a motor car is expected to come to the State and Lake Building, at the corner of State and Lake Streets, Chicago, where the Club has its headquarters, Wednesday morning, September 3rd, not later than 9 o'clock and to do his share toward conveying to Elgin those of the members who have no automobile. By this means the solidarity and good fellowship of the Club will be exemplified to the public and the members will start out as a body rather than in small, dissociated groups. The automobile procession will set forth as soon after 9 o'clock in the morning as possible.

Arrangements have been made to have dinner served on the grounds at Wing Park, Elgin, Illinois. The day will be spent in all kinds of games, such as tennis, golf, baseball, jumping matches, and foot races. A large and varied assortment of prizes has been given to the Club as rewards for the winners in the day's contests. Virtually every manufacturer and jobber of hardware and related lines in the Chicago territory have donated some useful article for that purpose. There will be enough consolation prizes so that everyone who takes part in the Annual Outing and Field Day of the Hardware Club of Chicago will have a souvenir by which to remember the event.

ADVERTISING CREATES MORE TRADE.

Advertising has played a very important part in creating for and revealing to us the new conception of our national responsibilities and duties, declared Francis H. Sisson, vice-president Guaranty Trust Company, New York, in an address before the Advertising Council of the Chicago Association of Commerce. America's titanic efforts and achievements during the war would not have been possible without the aid of publicity, which helped to make the "impossible" possible. Advertising was never before so universally recognized as one of the most powerful

creative and constructive forces in the world. But, like every other great basic element in our existence, it, too, has undergone changes and has caught the spirit of the dawning era of a new peace. It has been quickened into a new life; it has acquired new potentialities; never before has it exerted such influence over minds and hearts of mankind. It has reached and stirred our souls to the sublimest sacrifices.

It matters not that this power resulted from the most intense emotional period in the world's history and that it was due chiefly to patriotic fervor, for advertising was largely instrumental in creating the very emotion and patriotism from which it gained its greatest strength in appeal. Each reacted upon the other; each developed the other. And for the first time, advertising sounded the depths of human nature. It penetrated to the elemental in human nature.

That is the paramount lesson, as it was the paramount achievement, of advertising during the war. That is the foundation upon which advertising must work in building the business of the future. That is the basic truth of which we must not lose sight.

We realize as never before that advertising is limited only by the limitations of human nature; that its laws can no more be codified than can those of human nature; that every new discovery about human nature furnishes a new factor in advertising; that all our vaunted accumulation of advertising knowledge is only fragmentary, incomplete, disjointed, and defies definition in concrete, precise, axiomatic terms, even as our knowledge of human nature.

It is well that we understand these fundamental facts; that we comprehend how ideas have changed the world over; that we sense and study the new human environment which exists today.

INCREASES FACTORY FACILITIES.

The steadily rising tide of orders which is flowing into the Niagara Machine and Tool Works, Buffalo, New York, necessitates an enlargement of factory facilities. In consequence, an addition to the plant, 85x200 feet, is being constructed to meet the growing demand for the Company's products.

FOSTERS GROWTH OF GUN CLUBS.

"The Sport Alluring" as trapshooting is called by the E. I. du Pont de Nemours and Company of Wilmington, Delaware, is being advertised continually by this Company. Many retailers are in a position to do much toward organizing gun clubs in their home towns. Such an enterprise naturally boosts the sales of guns, ammunition, and sporting goods. The E. I. du Pont de Nemours and Company is more than willing to cooperate with dealers in establishing gun clubs and will furnish all information desired on this subject. In addition to ammunition, among the principal Du Pont products are leather substitutes such as Fabrikoid, Rayntite Top Material and Fairfield Rubber Cloth; chemicals including coal tar distillates, commercial acids, alums, ethers, pyroxylin solutions, etc.; pyroxylin plastics like ivory, shell and transparent py-ra-lin and specialties; and dyes, varnishes,

paints, pigments and colors in oils, stains, lacquers and enamels for industrial and home uses. The home office of the E. I. du Pont de Nemours and Company is in Wilmington, Delaware, and it has offices and plants in all the principal business centers.

PRACTICE IS MORE IMPORTANT THAN THEORY IN MERCHANDISING.

"All the problems of retail merchandising are soon to be after-the-war problems, but these do not commence yet," declared Frank Stockdale at the recent convention of the Retail Merchants' Association of Saskatchewan, Canada. "These problems are going to come about when reconstruction comes, but they are going to begin.

"Back in your home town there are a number of retailers who have an idea that the only way to learn this business is through experience. In an Ontario town someone handed me an enquiry along this line: 'Which is more important in business, theory or experience?'

"I ask you, which is more important, the blackboard or the chalk? We have to have some theorists. Theory has a different meaning for each individual. To lots of people anything they have not used in their business is theory. A lot of retail merchants shut themselves in or they try to shut the other fellow out, but they are imprisoned to that extent. Some think they can shut competition out, but when you do this you may as well call in the gravedigger. All we want is fair treatment. When a man asks for more than that you have to grant it to the other fellow as well. There are two types of merchants. One throws open the door and goes out after things. Japan went to all the countries of the world and investigated, and adopted the best ideas and methods which she could find. Today Japan is a first-rate power, while China is a third-rate power. Japan has profited by the experience of others.

"The science of arithmetic has come up through the ages of experience, yet while many public accountants do not know much about the important question of percentages, many retailers will dive into this involved matter without forethought. There is much truth in the saying, 'Fools rush in where angels fear to tread.'

"These conventions are great idea markets. The trouble is that we take only the ideas that we recognize as our own. You have a hazy idea about a lot of things but not a definite one. You have a lot of wobbly ideas and you are not really sure of them. When you have them strengthened you feel like building on them and putting a real roof on the construction. You come to conventions to get your wires connected. Many merchants have their wires crossed.

"After-the-war prices may be one of the after-the-war problems. This phase of the matter has been in our minds for some time, owing to a changing market, but I will not say what prices are going to be. The opinion of some long-headed merchants is that now the armistice has been signed, the war is over, and yet we find prices in some lines increasing. There is apt to be a sense of false security. For a while the tendency

was to hold back for a decline in price. Other merchants think that as prices have not dropped since the armistice was signed that prices are not going to drop. There are not many people who think that prices are going back to 1914 standards. There are at least two big reasons for this. One is that the price tendency for years has been upward. The reason for this tendency is still at work and the last five years would represent a substantial increase. If wages stay up, prices must stay up. Labor says wages will stay up. But the retail merchant who gives too much attention to prices now is going to be left. The decline from present levels will be very gradual.

"We have had some fictitious values in merchandising, and this is going to be squeezed out for a while. Retailers are responsible in some part for the high prices. An actual shortage combined with the fact that stockrooms have been stored with goods, creates an artificial price.

"Stores show the things the retailer is most proud of. I saw the stockroom of a certain store recently. The retailer pointed to certain goods selling now at \$1, which he bought early and could sell profitably at 50 cents. There retailers proudly point out their 'good buys,' but it is a fact that the poorest buyers have won the biggest stakes under recent conditions. On an up market the retailer makes most who sells out before the market drops. Inefficiency has been patting itself on the back, and if some of you have been doing this you should do something radical."

Mr. Stockdale at this point referred to a recent visit to another store wherein he found the stock to be very low, and ragged. The merchant had been buying bankrupt stocks.

"There are not many bankruptcies lately," said Mr. Stockdale. "This merchant was placing his bet that the bankruptcies were only postponed. There are lots of bankruptcies in this country which have been postponed. As soon as the market begins to level off there will be a great many changes in business. People are looking for a world readjustment. As long as the market was creeping up there was coming in an extra profit to take care of any possible loss, and a lot of merchants have eaten up that profit. An increase in dollars of sales is no good, but an increase in volume of business transacted is required.

"If 90 per cent to 95 per cent of the merchandise is bought at a certain price and then the price jumps and only about 5 per cent of the merchandise changes hands in a season at that price, I claim it is more or less of a fictitious price."

At this point Mr. Stockdale spoke of another retailer who had increased his sales recently from \$60,000 to \$80,000 per year. He had been making a net profit of about \$3,000 recently while in 1917 he made a net profit of \$8,000. He had recently been selling close to the real market and not a fictitious market.

"The extra \$5,000 which this merchant made in net profit in 1917 is a fund he holds in trust owing to a changing market. He will lose when the market declines and it may take \$500 one year and \$1,000 another year to balance things up. Merchants should keep money from such a source as this to take care of down market losses.

"Many men who can run a retail store well, do not know how to look after money when they get it. If a merchant has a particularly good season he should put the extra money into a reserve fund. At all times if you have not money for a reserve fund there has been something wrong with your business and you should straighten it out."

Hereupon a problem of buying, for wartime and after, was outlined by Mr. Stockdale.

He cited two cases. In one the average stock on one annual turnover was \$400, whereas in the other store with a turnover four times a year, the average stock at each turn was \$100 during the year. Sales amounted to \$600 with a profit margin of $33\frac{1}{3}$ per cent.

Mr. Stockdale explained that margin was an opportunity for profit and also an opportunity for loss.

"The sales in the foregoing case were \$600, but the sales at stock were \$400 in the case of the single turnover. In the second instance the sales were \$600, but sales were \$400 at cost where there are four turnovers to the year.

"The quintessence of merchandising is to carry as many of the \$100 lines as possible, and to be careful on the other lines which run a high average stock, and only turn once or so in the year."

Speaking further regarding this illustration Mr. Stockdale pointed out that if prices dropped 10 per cent the first merchant would lose \$40 by carrying an average stock of \$400 on one turnover during the year, while the second merchant would lose only \$10 because he carries lines which turn four times a year at an average value of \$100.

"Carry more lines in quick turning merchandise. The losses will be on the slow turning lines," said Mr. Stockdale.

In regard to the matter of deciding which are slow turning lines, Mr. Stockdale stated that the man who knows how to buy goods for quick turnover will win, and that the best way to tell is to have records. Each merchant should have a good stock-taking system.

"Merchants spend their money taking care of their money, but they do not give the same attention to their merchandise which represents the investment of their money. It is much more important to look out for the cash in your merchandise, and sooner or later I hope we will all have stock records in our stores for this purpose.

"One merchant says he buys goods for 60 cents and sells for \$1, and thinks he is getting a long profit. The successful retailer is one who gets the best profits, not the best margin. The jeweler gets a long margin on goods sold, but his turnover is very small. Margin does not tell what profits you have. You must know the costs of carrying and selling an article before you know what your profit is. It costs a lot to handle and sell long margin goods."

At this point Mr. Stockdale quoted the following definition for turnover: "Turnover answers the question, 'How long does the merchandise stay?'"

A rule for figuring turnover was outlined as follows: "Divide the sales by the average stock carried at the selling price."

A question as to whether margin should be figured

on the sales price or on the cost price, and why, was answered by Mr. Stockdale as follows:

"It should be figured on the selling price because it takes an expert to do it any other way. The average retailer can not do this because in getting his cost of doing business—say 25 per cent—he gets the figures by dividing his sales into his own expenses. Therefore having got the percentage you say the cost of doing business is 25 per cent of the sales. Then add 10 per cent for profit and figure on cost price and you haven't anything.

"The percentage of an apple cannot be compared with the percentage of an egg. Twenty-five per cent of a big apple is not equal to 25 per cent of a small apple.

"What does more harm than anything is the manufacturer who tells you you are making 25 per cent on his goods, whereas you are only making 20 per cent."

A rule for figuring margin was as follows: "Subtract margin from 100 per cent and then divide it by the cost."

This point was illustrated as follows: \$2.40 is the cost of certain merchandise. It was required to mark the goods to give a margin of 27 per cent. Subtracting 27 per cent from 100 per cent it leaves 73 per cent to be divided into \$2.40, giving \$3.28 as selling price.

Question: Is it proper to keep stock at the selling price or at the cost price?

Answer: Ninety-five per cent of retailers keep it at the cost price, but the department stores are keeping stock at the selling price. It is easier to take stock at the selling price and it works all right as far as turnover is concerned. It is best to keep stock at the selling price, but unless the margin is uniform you can not keep your stock at selling price and get back to cost when necessary.

Question: Would it not be necessary to keep stock records of each department in order to keep stock at selling price?

Answer: For the purposes of merchandising the department store says that stock at selling price is best. For purposes of financial statements of the business and for insurance you could not have stock at selling price. The department stores have this because they merchandise, and the average retailer doesn't know what that means.

Question: A merchant gets an invoice of mixed goods. Freight and handling expenses amount to a certain sum. In figuring profits he has to start with the laid-down cost in the store.

Mr. Stockdale figured out a test case as follows in establishing the laid-down cost of the various articles in a mixed consignment as outlined. The invoice of goods was for \$200; cartage and other expenses were \$20; laid-down cost was \$220 for the shipment of various articles. Taking among the consignment to be 10 bags of rolled oats at \$10, the cost of which is \$100, the cost of cartage, etc., of \$10 was added, making a total of \$110. The cost of doing business in the previous year was 25 per cent; adding 10 per cent to cover profit, making a total of 35 per cent, this was subtracted from 100 per cent, leaving 65 per cent to be divided into the laid-down cost of \$110, giving selling price of \$170 in this case.

Question: How much should a retailer make on groceries at present?

Answer: If he makes 3 per cent net on groceries he is receiving a good return if his stock is turning an average of 10 to 12 times a year.

TELLS WHY ORGANIZATION PAYS.

A joiner used to be an object of ridicule in the community, says George D. McCarthy in the Credit World. He was a man who paid dues in every organization that would take him, his primary object being to have his name in the list of officers and wear a scarf in parade and a badge at conventions. Today the joiner is respectable and respected. In fact, if one isn't a joiner, at least to the extent of joining the trade organization to which he is eligible, he is looked upon as a fogey.

Why the change? Because the organization pays.

The American business man is, as a rule, of the "what-is-there-in-it-for-me?" type. He doesn't believe in organization for organization's sake. He doesn't pay dues unless there is something in it for him. And because organizations have increased and multiplied and because there is an organization of every trade and business and occupation and office that one can call to mind, it may be set down as an absolute, double-riveted cinch that organization pays or the conditions named would not exist.

The convention has experienced a metamorphosis something like the organization. The convention used to be a joy-ride at the expense of the business or the boss. Wet goods flowed freely, the burlesque shows did a big business, the program was 99 per cent entertainment and 1 per cent business to which nobody paid any attention, and Bill Jones and John Smith knew that once a year at least they would meet and merge their discordant voices in that convention classic, "For he's a jolly good fellow."

Not so today—speaking of conventions of trade or business organizations. There is a program consisting of 99 per cent business and 1 per cent pleasure—perhaps. If the pleasure part is cut out of the bill the attendants at the conventions are better satisfied. Joy-water is in disrepute and the vaudeville singers' union has a monopoly on vocal melody. When the boss pays expenses to a convention in these days he charges it up to the proper expense division with a certain knowledge that it is an investment that will return to the business with additions.

Organization is a serious matter. It is so regarded. The days when every man's business was his own concern have gone by. Business men have learned, many of them at great cost, that what affects one firm affects all; that if the one gives up to his fellow men the improvements in methods of doing business that he has devised, his fellows will give up to him improvements that they have devised and that will increase profits; the one man can do little to fight trade abuses, but if all who are involved in and affected by the trade abuses get together to stamp them out they will go; that in the matter of legislation all must look out for each, because each working alone is ineffective. The Hawaiian pineapple growers, the white pine lumber

manufacturers and others have found that by combining their forces they may conduct great advertising campaigns that increase the business of all, whereas no one grower or manufacturer could hope to conduct such a campaign all by himself.

Any member of a business organization who is really alive to its purpose, who attends its meetings with a serious mind, can give a hundred reasons offhand why he is a member of the organization and why it pays him to be a member.

Sure, organization pays. It pays in the kind of dollars for which the American business man is striving. That's why the list of commercial organizations of the United States will continue to grow.

YANKEE SCREW DRIVER IS CAREFULLY TESTED IN THE FACTORY.

Mechanics who have experienced trouble with the blade of a screw driver twisting out of alignment under heavy pressure usually find that the tool is of some unknown manufacture. They are the best customers for standard, trade-marked screw drivers. It is a fact widely known to the trade that nationally advertised articles keep up their standard of excellence for the simple reason that otherwise the money spent upon advertising would be wasted because demand could not be maintained. Uniform soundness of material and highly trained workmanship are elements of manufacture which are considered indispensable to the production of the various tools made by the North Brothers Manufacturing Company of Philadelphia, Pennsylvania. In the accompanying illustration is shown the "Yankee" plain screw driver, Number 90, which is one of the many excellent articles of hardware turned out by this Company.

This screw driver comes in fourteen sizes, Number 90 being the standard style. It is a strong, durable, well-balanced tool and the manufacturers claim that the fastening of blade and handle is such that they can not be loosened in use, or in even the usual abuse. When such an unqualified guarantee is offered, it is proof enough of the high quality and workmanship of the product. The blade and ferrule are finely polished. The handle is of hardwood, finished in dull dead black, combining a handsome appearance with lasting service. This "Yankee" screw driver is suitable for all classes of work on account of the various lengths of blade and, it is claimed, will render faithful service for generations. Like all the other products of the North Brothers Manufacturing Company, each screw driver is thoroughly tested before leaving the plant. The North Brothers Manufacturing Company has long been known for the lasting qualities of its products and their excellent workmanship and dealers should write to the North Brothers Manufacturing Company of Philadelphia,



Yankee
Screw
Driver,
Made by
North
Brothers
Manufacturing
Company,
Philadelphia,
Pennsylvania.

Pennsylvania, for a copy of their latest catalog and literature.

OPPORTUNITIES FOR FOREIGN TRADE PRESENTED BY BUREAU OF FOREIGN AND DOMESTIC COMMERCE.

The Bureau of Foreign and Domestic Commerce through its Special Agents, Consular Officers and Commercial Attachés is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

30451—The representative of a commercial department of a banking institution in Greece is in this country and desires to be placed in communication with manufacturers and exporters with a view to opening branches or agencies for the sale of American goods in that country. Exclusive agencies only are desired. References.

30452—A commission agent in Spain desires to secure an agency for the sale of all kinds of manufactured articles. Correspondence should be in Spanish. References.

30462—A firm of import merchants in India desires to connect with selling agents of American manufacturers of hardware, general sundries, tin plates, and especially aluminum. Quotations, with samples where necessary, are requested. Reference.

30464—A firm in Spain devoted to the transport of merchandise coming from foreign countries and to the clearance of cargoes of all kinds wishes to represent American navigation agencies and companies, whether passenger or freight, forwarding houses, shippers, and transportation agents. Correspondence may be in English. References.

30414—A firm of commercial agents in Brazil desires to get in touch with manufacturers only of iron and steel, and products, metals and supplies, hardware, etc. Correspondence may be in English. References.

30415—Agencies on a commission basis are desired by a firm in Italy for the sale of general merchandise. Correspondence may be in English.

30420—The president of a commercial firm in China is in this country and desires to purchase and to secure an agency for the sale of penknives and athletic goods. Reference.

30423—An American firm with connections in China and Japan wishes to place its organization at the disposal of substantial manufacturers who desire to have agencies in those countries.

30426—Hardware and general merchandise in similar lines are required by a business man in France. An agency is also desired. Quotations should be given c. i. f. French port. Terms, cash against documents. Correspondence may be in English. Reference.

30440—An American who is established in France desires to secure agencies for the sale of steel and steel products, such as wheels, tires, axles, forgings, castings, and bar and sheet steel.

30433—An agency is desired by a man from Belgium who is in the United States for a short time for the sale in Belgium of automobiles and accessories, hardware, and kitchen and household articles.

30434—A firm in Italy wishes to secure an agency from a general export house for the sale of kitchen and household utensils, locks and padlocks. Correspondence may be in English. Reference.

30435—The purchase is desired by a firm in India of hardware and fancy goods, such as nails, rivets, brass and copper screws, files, padlocks, umbrella fittings, paints and varnishes, cutlery, door and carriage handles, hinges, bolts and nuts, mill stores, and metal wires of all descriptions. Quotations should be given c. i. f. port in India. Terms, payment against document in American currency. References.

30441—A merchant in the British West Indies desires to secure an agency for the sale of hardware and general merchandise. Quotations should be given c. i. f. West India port or f. o. b. American port. Payment, 30 to 60 days. References.

30444—A Scandinavian firm desires to secure an agency for the sale of tools and construction materials. Correspondence may be in English. Reference.

30448—A firm in New Zealand desires to secure an agency for the sale of hardware. Quotations should be given c. i. f. New Zealand or f. o. b. port of shipment. Terms, cash against documents. References.

COMING CONVENTIONS.

The American Hardware Manufacturers' Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, October 15, 16, and 17, 1919. F. D. Mitchell, Secretary, 4106 Woolworth Building, New York City.

The National Hardware Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, October 15, 16, and 17, 1919. T. James Fernley, Secretary, Philadelphia, Pennsylvania.

Automobile Accessories Branch of the National Hardware Association, Hotel Sherman, Chicago, Illinois, December 8 and 9, 1919. A. H. Nichols, Chairman, Detroit, Michigan.

Oklahoma Hardware and Implement Association, Oklahoma City, Oklahoma, December 9, 10, and 11, 1919. W. B. Porch, Secretary, Oklahoma City, Oklahoma.

Wisconsin Retail Hardware Association, Milwaukee, Wisconsin, February 4, 5, and 6, 1920. P. J. Jacobs, Secretary, Stevens Point, Wisconsin.

Michigan Retail Hardware Association, Hotel Pantlind, Grand Rapids, Michigan, February 10, 11, 12 and 13, 1920. Exhibit in Furniture Exhibition Building. Arthur J. Scott, Secretary, Marine City, Michigan.

Pennsylvania and Atlantic Seaboard Hardware Association, Bellevue Stratford Hotel, Philadelphia, Pennsylvania, February 10, 11, 12, and 13, 1920. Exhibition in Philadelphia Commercial Museum. Sharon E. Jones, Secretary, 1314 Fulton Building, Pittsburgh, Pennsylvania.

Minnesota Retail Hardware Association, St. Paul Auditorium, St. Paul, Minnesota, February 17, 18, 19 and 20, 1920. H. O. Roberts, 1030 Metropolitan Life Building, Minneapolis, Minnesota.

New York State Retail Hardware Association, Onondaga Hotel, Syracuse, New York, February 17, 18, 19 and 20, 1920. Exhibition in State Armory. John B. Foley, Secretary, 607 City Bank Building, New York City.

Missouri Retail Hardware Association, St. Joseph Auditorium, St. Joseph, Missouri, February 17, 18, and 19, 1920. F. X. Becherer, Secretary, 5136 North Broadway, St. Louis, Missouri.

New England Hardware Dealers' Association, Mechanics' Building, Boston, Massachusetts, February 23, 24, and 25, 1920. George A. Fiel, Secretary, 10 High Street, Boston, Massachusetts.

Ohio Hardware Association, Hotel Gibson, Cincinnati, Ohio, February 24, 25, 26 and 27, 1920. James B. Carson, Secretary, Dayton, Ohio.

RETAIL HARDWARE DOINGS.

Iowa.

C. A. Wenstrad and Son, Red Oak, have bought the Sampson hardware business at that city.

Minnesota.

The Range hardware store at Eveleth has been purchased by Emil Linstrom and Emil Franks.

Montana.

J. A. Stewart has sold his hardware business at Columbia to L. M. Monsees.

H. O. Bundy will open a hardware store at Broadview.

Missouri.

Raymond Mayer and Ralph W. Campbell have bought Samuel I. Drisdale's hardware store at Lexington.

E. Lewis has sold his hardware business at La Monte to John Moles.

Nebraska.

Julius Peterson has sold his hardware business at Blair to C. M. Christensen and Charles Hansen.

Hans Jepson will open a hardware store at Bradish by October 1st.

R. W. Wallace has bought I. O. Brownfield's hardware store at Overton.

D. Donovan and Son have sold their hardware store at Peru to I. W. Wright.

J. A. Weigan has purchased Henn and Son's hardware business at Petersburg.

W. O. Ritchey has sold the Plymouth Hardware Company's stock at Plymouth to Fred Cox.

S. E. Sorensen has sold his stock of hardware and implements to Hans Johnson of Rockville.

Fred E. Romberg has bought Herman Rexin's hardware store at Scribner.

North Dakota.

Henry Hoff has bought an interest in the Wishek Hardware Company at Wishek.

The hardware firm of Bishop and Wiebke at Belfield has been dissolved, Earl P. Bishop continuing the business.

Tennessee.

Clemens and Greene, Lebanon, will move their hardware business to Pulaski.

Wisconsin.

A. W. Greenwaldt has sold his hardware store at Abrams to Frank Pierre.

AUTOMOBILE ACCESSORIES SOLD BY HARDWARE DEALERS

The Magneto Generator Starter Electric Company has been organized at Jersey City, New Jersey, to manufacture electric starters.

With \$2,500,000 capital, the Van Sicklin Speedometer Company of Elgin, Illinois, has been reincorporated under the laws of Delaware.

G. F. Myers and E. M. Culp are the incorporators of the Myers Auto Pump Company, Paterson, New Jersey. The capital stock is \$100,000.

Plans have been completed by the Simms Magneto Company, Bloomfield, New Jersey, for a two-story, 70 x 120 feet, addition to its plant, to cost \$75,000.

The Johnson Rim and Parts Company has been incorporated with a capital stock of \$50,000, at Buffalo, New York, by L. E., and H. R. and P. T. Large.

With a capital stock of \$35,000, the Syracuse Auto Parts, Incorporated, has been incorporated at Syracuse, New York, by F. D. Russell, W. B. Carroll, and P. B. Schober.

With \$105,000 capital, the Horsey Products Company, motor accessories, has been incorporated at Cleveland, Ohio, by E. T. Horsey, R. F. Henn, E. C. Henn, and others.

The Fulton Company, 1910 St. Paul Avenue, Milwaukee, Wisconsin, makers of automobile accessories, will build a new plant in West Allis to be 60x160 feet and will cost about \$45,000.

The Gill Manufacturing Company, Chicago, Illinois, will build a plant at Jeffrey Boulevard and South Chicago Avenue, the first unit of which is to cost about \$100,000. The company makes automobile parts.

Dave Yover, Edward P. Bauman, and Paul P. Scharffin have obtained a charter to manufacture tools under the name of the Collapsible Auto Rim Adjustable Tool Manufacturing Company, Indianapolis, Indiana. The capital stock is \$100,000.

ADJUST BATTERY TO USAGE.

On modern cars provision is made for charging the battery as the car runs. It sometimes happens that the charging rate as provided in the system installed on the car is not quite right for the service that the owner demands of his car.

Thus one owner may run a good deal at night and use his lights for lengthy periods, while running little by day. The result is that the battery is undercharged. On the other hand, a second owner may seldom use his car at night and may not call on his starter often, with the result that the battery is overcharged.

It is a simple matter after the car has been in ordinary service for a short time to get the charging

rate just right for the use to which the vehicle is to be put.

COOPERATE WITH MANUFACTURERS.

The advice of a successful dealer in automobile accessories is that now is the time to make the show window talk to your customers in the same language that the manufacturers' advertisements are using. Now is the time to watch the national magazines that circulate almost as widely among your own customers as do your local newspapers, for advertisements of the accessories you carry in stock, and those that you ought to carry in stock.

Probably you read one or more of these magazines yourself. If you don't you are missing something of value, not only in the way of information that you might gain for yourself, but as a matter of knowing what the accessory manufacturers are doing to create a profitable demand for goods that you can sell at a good profit.

For instance, suppose that you see in one of the big magazines a full page or a double page spread telling motorists why they ought to buy some accessory or other. You don't need to be told that a large percentage of your own customers are reading that same advertisement and that some of them are already wondering where they can buy that particular article.

Now, it's up to you. Are you going to let them continue to wonder, or are you going to get busy and let them know by means of your window, your newspaper advertising, your conversation, that you are ready to supply them?

Many of the manufacturers make it their business to tell you in advance when these big advertisements are scheduled to appear. They can't come to you personally and tell you about what they are doing for you, but they send letters and circulars that tell you just the same thing that they would tell if it were possible for them to step into your office.

TELLS HOW TO TRANSFER BATTERY ACID FROM A CARBOY.

Some difficulty may be experienced when transferring battery acid from a carboy to a shock container, especially so if it is necessary to tip the carboy for this purpose. It is possible, however, to force out the acid to a desired amount by the use of air pressure. Fit a bent glass tube through a cork which is placed in the mouth of the carboy and extend it to the bottom. Then place another bent glass tube through the cork, through which pressure can be applied to the surface of the acid with the aid of a common foot pump or with an ordinary hand pump.

ADVERTISING CRITICISM AND COMMENT

Helpful Hints for the Advertisement Writer

Good use is made of illustrations in the advertisement of the Ferratt Hardware Company, which appeared in the *Ledger-Dispatch* of Norfolk, Virginia. The picture at the top is so designed as to give a strong suggestion of thorough screening. It has the right text to clinch the appeal of the illustration. The

ment. Plenty of white space is left for emphasis. This is the kind of copy which brings business.

* * *

A brief list of goods, from screen doors to lawn mowers, is the substance of J. M. Scantlin's advertisement in the *Daily Democrat* of Princeton, Indiana.

It is well displayed in bold-faced letters. The words, "Goods Right and Prices Right," at the end of the list constitute the only feature which differentiates it from a descriptive business card. While it is true that the space occupied by this advertisement is small, nevertheless it could be used to better advantage. One of the

list could be selected for emphasis. Its quality and price could be explained in a few words conveying a direct selling argument to the prospective customer. As the advertisement stands, it does not talk to anyone in particular. It invites no special attention. Of course, it keeps the name of J. M. Scantlin and his goods before the public. But that is not enough. An advertisement should influence people to come to the store and buy merchandise. With the exception of the words at the end of the list of articles, there is nothing in this advertisement which could be construed as an appeal to the needs or desires of the householder.

* * *

PICTURES HELP SELL GOODS.

The language of pictures can be very easily and usefully employed, and as a matter of fact is so employed very successfully in the case of ordinary merchandise, although it is a rather difficult method to employ for iron and steel, machinery, hardware, and other products of American industry which do not easily lend themselves to pictorial representation.

If You Can't Come Down, Phone Your Order—We Deliver



Make Your Home Fly and Mosquito Proof

We can supply you with all the necessary screen doors, windows, wire cloth, frames, etc. Now's the time to get your screens up.

Good Doors, \$2.00 and upward. Ready made Screens, adjustable to fit any window, 50c 60c, 75c, \$1.

Knock-Down Frames: 35c, 40c, 50c each. Just tell us your wants



\$2 Mop Buckets, \$1.79

Heavy patented wringer mop buckets, the \$2.00 kind for \$1.79. Cotton mops without handles, 50c and 75c each. Mop handles, 25c.



\$4.98

Just what you need these chilly mornings and evenings. Genuine Perfection Oil Heaters—full size—\$6 kind \$4.98.



Galvanized Pails

Heavy galvanized pails 45c, 50c, 60c, 75c, \$1, according to size and weight.



Garden Tools

Hoes, Rakes, Spading Forks, Plows, Cultivators everything you need for your Victory garden. Seeds, too. Let us serve you.



Galvanized Tubs

The better kind, at \$1, \$1.25, \$1.50, \$1.75.

FERRATT Hardware Co., Inc.
666 CHURCH STREET PHONE 2139
Distributors Hercules Plaster Board

specific statement of prices, set forth in readable type, rounds out this part of the advertisement to perfection. The other articles listed, illustrated, and plainly priced, are properly described and attractively placed in the layout with reference to the entire advertise-

HEATING AND VENTILATING

URGES THE USE OF BRAINS WHEN INSTALLING WARM AIR HEATERS.

At the recent convention of the National Warm Air Heating and Ventilating Association in Columbus, Ohio, A. T. Fleming, Ohio State Fire Marshal, gave some sound advice regarding the installation of warm air heaters with special reference to fire hazards. Among other things, he said:

"Now, in the installation of warm air heaters I find a great deal of trouble in the state of Ohio. If you will go over my records across the way, you will find we have had a rather large percentage of fires from improperly installed warm air heaters. And I speak of all of them. You are dealing with the man down the way who goes into a man's cellar and puts in his warm air heater installation along the line of least resistance, with no idea of the proper lay-out of the plant. It never comes into his head that he should make a general plan of that basement before he can properly put in a heating system. They will stick in a bunch of pipes, and collect their money for the job, and when the man begins to live in the house he finds he can't do anything with it. He has to force his warm air heater. He has to keep it red hot. He has to put his warm air heater out of business in an effort to get some kind of heat in the bathroom and in the back bed-room where his daughter sleeps. You know that is true. As a matter of fact, you are the fellow, and your warm air heater is the warm air heater, that is condemned by the general public because that tom-fool has gone in there and hasn't used any brains in installing that warm air heater. I think you will agree with me that I am right. You asked me the question about the pipeless warm air heater. I think a lot of you have that in your minds. I am opposed to the pipeless warm air heater. And at the same time there are some warm air heaters along that line that we can not find ground to condemn. If your warm air heater is one of that type, if it is so properly equipped that it would not be possible for it to cause fire, then we can not condemn it. But as a general proposition it is not the thing. Not very long ago we ordered out several warm air heaters simply because they had put them in, just 18 inches from the top of the dome of the warm air heater, which was red hot all the time, to the floor. They cut out a section of the floor, and made no protection by an air chamber or anything of that kind, and, of course, in less than 48 hours the building would have burned. But there are people throughout the state, who will insist on putting in that kind of a job, and if they do, it will be ordered out.

"It is a good deal better for us to make our program right, to make our plan right, and if we are dealing in that kind of a job, to have that plan and program O. K'd, and to insist on it that whoever puts that

warm air heater in absolutely adheres to that plan. Then you are relieved of that part of the responsibility.

"There is no O. K. in our office on a common floor or hanging warm air heater. That possibly is a good thing for you people to hear. Every place we find them in the state of Ohio, we order them out. There are a great many people who simply cut out a hole in the floor, set a gas floor warm air heater in there, and use it. As a result they go away and leave the gas on, and we have a fire. That has become so dangerous and hazardous that every place my men find one of those, he immediately orders it out.

"I believe you ought to use the greatest care in making the outline of your basement, and in setting your warm air heater, so that you are absolutely sure that you have the proper height between your warm air heater and the floor area, and also that you have your warm air heater so placed that there is at least as nearly as possible from eight to ten feet of pipe from the warm air heater, before you pass through the floor register. You can not get it all the time. I know that. But in the event you can not get it you ought to safeguard the pipe that is nearest to the warm air heater that passes possibly to an upstairs riser in the very best way possible. Not very long ago in Columbus I was called out here to inspect a certain warm air heater. You notice I am not mentioning any names just now. The warm air heater was put in and the top less than 12 inches from the joists of the floor. The pipes came off of the side, and in five different places those pipes were up against the wood within five feet of the warm air heater and without the slightest protection of asbestos or anything else. You know a man who would put a job like that in ought to be in the penitentiary.

"If you could just have assurance of the reliability of the men who are making the installation, and if you could assure yourself that those fellows are going to follow out your plan and your program in the installation of the warm air heater, I want to say to you it would relieve our minds and our office of one of the greatest burdens we have to contend with. It would relieve you in your fire insurance rate. And it would relieve the United States of a part of that awful waste, 90 per cent of which is absolutely avoidable.

"I think you ought to pay particular attention to your manufacturing rooms. I find in a great many instances that some of the most serious hazards we have to contend with exist right there in manufacturing establishments where men are anything but careful. Now, I am not criticizing. You and I are just talking together, so that you will know exactly what we find, and you will be able to correct the hazards in your establishment. In your establishment

you ought to see that your electric wiring is right. That has nothing to do with warm air heater manufacture, however. There ought to be conduit wiring and nothing else, and you ought to see to it that even if that conduit wiring is installed, it ought to be properly passed and inspected before you pay the bill. There are a lot of so-called electrical men doing work who know little or nothing about it. Some of the largest, some of the most serious fires we have, start after the plant has been closed for the day, and possibly the current of the power house so fluctuates that you have a short circuit. You can not tell when it will come. But if you know electric wiring is right, and you have it properly inspected and passed, you know this danger is taken care of.

"You ought to be careful with all blow-torch work in your establishment, for the blow-torch very frequently causes a hazard. You do not know when it is going to let go. This is a little out of your line of work, but I want to give you a little illustration of what might take place in your plant.

"There was a vulcanizing plant in the rear of a certain garage building. They used it for vulcanizing. The vulcanizer was operated by gasoline. They put a little gasoline in the cup and let it go in order that it might be ready for use. As a result of that particular piece of activity 78 cars were burned up, a property loss of \$137,000, just for a little gasoline that was worth about 5 cents,—less than that. That same man left the place and went over to another garage, and within the last four weeks another fire took place from the same cause at 9:35 in the morning and burned up 47 cars with a property loss all told of \$296,000. The same man with the same kind of a vulcanizer and a cause that can be branded as nothing but absolute negligence or carelessness. Without care and attention to the little details in your plant you may have some kind of a conflagration.

"What I would like to have is the cooperation of every man in this organization to the extent that when a warm air heater is installed you will see that the rules that are laid down by the National Fire Protection Association or the National Underwriters or the State Fire Marshal of the State of Ohio, for they are all practically the same, are all adhered to to the letter. And if you find that any agent of yours, or any man handling your warm air heater is careless in his installation, I would immediately proceed to get another agent before you get into serious trouble in connection with your warm air heater work."

PREPARES TO MANUFACTURE WALL PIPE.

The Henry-Miller Foundry Company of Cleveland, Ohio, has finished the installation of a complete set of machinery and is about to begin the manufacture of an extensive line of double wall pipes in conjunction with other specialties for the heating trade.

SIMPLIFIED FITTINGS SAVE LABOR.

The Lamneck Simplified Fittings made by The W. E. Lamneck Company of Columbus, Ohio, are

the result of many years' experience and are said to answer every practical purpose. They eliminate warm air heater pipe troubles to a great extent and enable the installer to overcome many difficulties of building construction. The K. D. Round Pipe made by this Company can be instantly locked together without skill or tools. The lock is very simple. The pipe is shipped in drums of fifty feet each and all of the fifty edges are protected with metal caps. The Lamneck "Self Starter" Adjustable Elbows can be adjusted with the hands, no wrenches being needed. They are heavy with an extra deep swedge and it is said the segments cannot come apart. The Company has just issued a new catalogue, Number 2, that contains much valuable information to dealers and installers. Dealers should write at once for a copy of this catalogue to The W. E. Lamneck Company of Columbus, Ohio. Installers in the Chicago territory can order from the Central Heating Supply Company of 131 West Lake Street, Chicago, who carry a complete stock at all times.

HAS SELF-CLEANING DRUM AND RADIATORS.

The Front Rank Warm Air Heater, made by the Haynes-Langenberg Manufacturing Company of St. Louis, Missouri, which is shown in the accompanying illustration, has no direct draft to let the heat escape straight up the chimney. The manufacturers state that the smoke has a very long travel before leaving the heater and all of this travel is inside the casing. The long fire travel insures economy in the consumption of fuel. This heater is extremely simple in construction and is made of steel. It is easily managed. The drum and radiators are self-cleaning and it is claimed that they will not choke up, even with the dirtiest soft coal. The only part that needs cleaning is the horizontal dust box. The Front Rank burns any kind of coal or wood successfully. The fire pot is lined with fire clay tiling. On the larger heaters, heavy cast plates extend from the tile lining to the radiator collars, thus protecting the steel in the most exposed part. The drum or fire chamber is made of a solid sheet of heavy armor plate with a single seam, closely riveted like a boiler, and it is said to be absolutely gas tight. Heavy cast flanges are placed around the openings where the smoke passes from the drum into the radiators to protect the steel. Dealers can secure catalog and literature by addressing the Haynes-Langenberg Manufacturing Company, 4058 Forest Park Boulevard, St. Louis, Missouri.



Front Rank Warm Air Heater, Made by the Haynes-Langenberg Manufacturing Company, St. Louis, Missouri.

Front Rank Warm Air Heater, Made by the Haynes-Langenberg Manufacturing Company, 4058 Forest Park Boulevard, St. Louis, Missouri.

SHORTAGE OF COAL IS PROBABLE.

Diminished production because of labor troubles and emigration to Europe have already made themselves felt in the coal situation of this country. Coal famine in the Old World is acute—so much so that Herbert Hoover declares that unless the very widest, almost autocratic, powers be given in dealing with the coal situation in Silesia, nothing can save Europe from a crisis, which will show itself both economically and politically—Bolshevism feeds upon hunger and in Budapest there is a tremendous scarcity of food.

According to a special dispatch to the Public Ledger of Philadelphia, Pennsylvania, hospitals which contain over 20,000 patients have no antiseptic or dressings, there is no milk for children. Throughout Austria and Hungary rickets and tuberculosis have increased to an absolutely appalling extent. In fact, rickets is described as being an almost universal disease among children in Hungary.

Everywhere paper clothing and paper bandages have to be used, the limited stock of the better dressings being reserved for very special cases. There is no vaseline or any other ointment with which to treat skin diseases and bed sores caused by malnutrition of babies. Sterilizing has had to be reduced below the safety point owing to the coal shortage, and cleanliness of linen in hospitals has become as impossible as surgical asepsis.

Nearly all the troubles of Austria and Hungary can be traced directly to the world coal crisis. This question of coal is, indeed, at the present moment perhaps the most important question the world has had to consider since the outbreak of the war in 1914. America can supply Europe with a certain amount of coal, but for every ton of coal shipped from America to Europe one ton of foodstuffs will be kept in America. In Silesia, two of the biggest coal pits have been flooded as a result of political strikes, for which, perhaps, blame may be shared almost equally by the Pole and German.

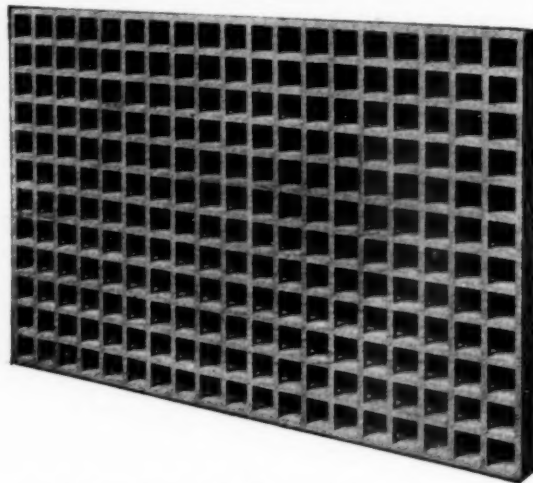
In spite of the difficulty, in obtaining precise information, it may be said with some confidence that this year's harvest is good except in the Baltic Provinces. In Central and Eastern Europe there is plenty of food in the ports and on the fields, but there is already enormous difficulty in moving those food supplies to towns and cities.

As an instance of what is already occurring it has been found necessary to take off the Orient express simply because in Austria there is not sufficient coal to run the train. When Mr. Hoover left Vienna he had attached to his car a truck containing 15 tons of coal, and it is not improbable that his train will prove to be the last from Vienna and the frontier.

PRODUCES VARIOUS STYLES OF WOOD FACES TO FIT ANY PURPOSE.

The Dover Wood Faces, one of which is depicted in the illustration herewith, have many advantages. They can be finished to match any woodwork and are adapted to many different positions such as hall seats, window seats, floors, next to fireplaces, and built into walls under stairways. The manufacturers, the Dover

Wood Face and Lumber Company, Dover, Ohio, state that they can furnish wood faces bent to any desired curve and that odd designs and sizes may also be secured. The Company owns large tracts of timber and operates its own saw mills and in this way is in a position to obtain the most suitable material for its



Dover Wood Face, Made by the Dover Wood Face and Lumber Company, Dover, Ohio.

wood faces. It specializes on plain oak grills but can furnish faces in cherry, bird's eye maple, curly maple, curly birch, quartered oak and walnut. Dealers should address the Dover Wood Face and Lumber Company at Dover, Ohio, for a catalog showing the many styles manufactured.

PUBLISHES CALENDAR IN COLORS.

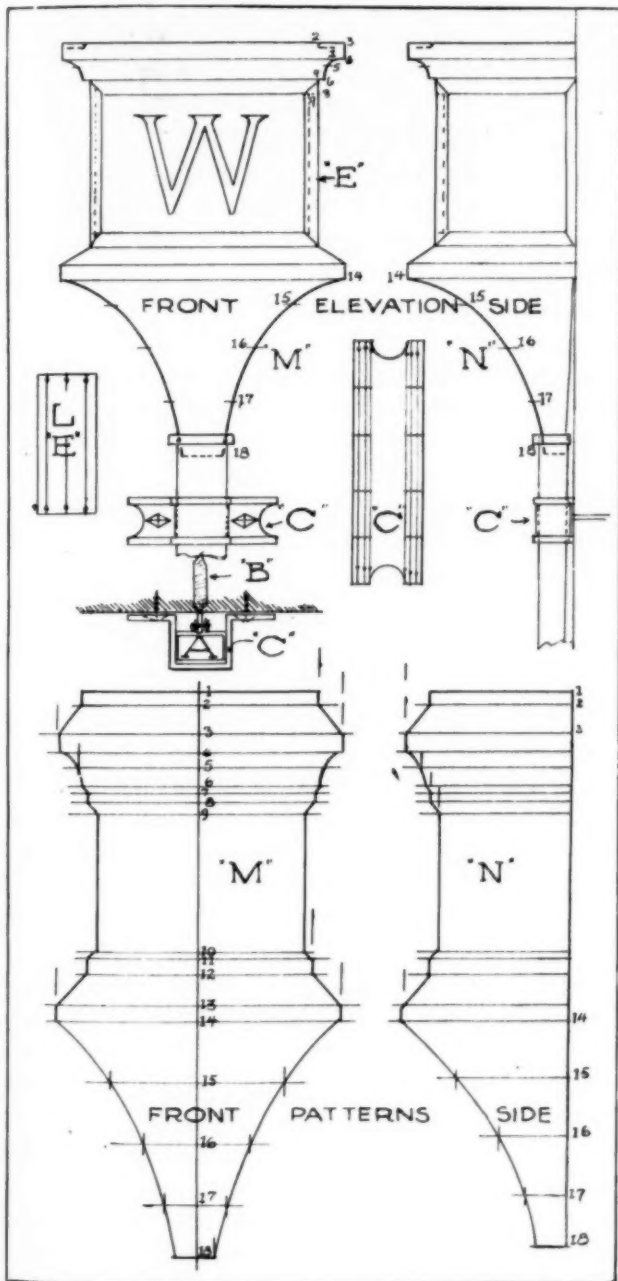
Most dealers are aware of the fact that calendar advertising pays. When the dealer distributes calendars with his name printed thereon, his advertisement will be seen daily for a year at least and this is a powerful selling influence. R. J. Schwab and Sons Company of Milwaukee, Wisconsin, has just gotten out two artistic calendars beautifully illustrated, one with Dobson's picture "A Chip of the Old Block" and the other, "An Allegheny Trout Stream" by Moran. The full size of each of these calendars is $11\frac{3}{8} \times 13\frac{3}{4}$ inches. The calendars are kept flat throughout the year by specially selected non-curling stock. In order that they may reach the dealers' customers in good condition, each one is separately inclosed in a light weight protective envelope and an appropriate greeting leaflet accompanies each calendar. The dealer's advertisement is printed on the calendar free of charge. This is an extremely expensive work of color printing and it is necessary for the Company to charge ten cents for each calendar (including the dealer's imprint) in order to cover part of the cost. There is also another motive in assessing this nominal charge, namely, that of making certain that the calendars will be used for the purposes for which they were designed. If given free, the likelihood is that they would not be used to advertise the Gilt Edge Warm Air Heaters but distributed among friends and thus their publicity value be wasted. Dealers should send in their orders at once to be sure and have them for holiday distribution. Further particulars will be supplied upon addressing R. J. Schwab and Sons Company, Milwaukee, Wisconsin.

PRACTICAL HELPS FOR THE TINSMITH

PATTERNS FOR LEADER HEAD.

BY O. W. KOTHE.

The main object of a leader head are the ornamental features it presents. Now and then they aid in



Patterns for Leader Head.

ventilating the sewer air and saving it from the gutter tubes. For this reason good taste should be displayed in designing them so as to make them artistic instead of constructing any old box like head which we so often see. Sometimes the owner prefers to have his initial made in block letters and planted on the face as is shown in this drawing. Also observe the flange over the strap which holds up the conductor pipe.

In designing a head of this kind it is best to draw a center line from which to measure the side lines of front elevation. This center line is not shown here but should always be used for construction purposes. Because without a center line it is difficult to obtain proportions and equal distances on both sides. The side elevation is drawn from the wall line which can be drawn first. Then the other view is projected from it. The curved lines of vase "M" and "N" must be made to suit the projection of leader head, and to save a lengthy development the front elevation line 14-18 is divided into equal spaces and lines projected into side elevation. By doing this we can develop the one pattern from the other elevation which saves a change of profile process. This of course takes a good eye by the draftsman so as not to get his curves too much out of uniform shape. To develop the pattern for front pick the stretchout from the side elevation with dividers transferring each point and bend on a line 1-18. Then from each point in front elevation drop line crossing those in pattern of similar number which gives the intersections for tracing the miters. The side pattern "N" is developed by picking the stretchout from the side line of front elevation and stepping it off below the side elevation. Project this pattern the same as the other one, establishing the miter line as shown.

The corners "E" which produce the panel effect are merely straight blocks formed as at "E." The block letter can be designed to any style and planted in place. Observe the metal band "C" which is placed around the flange holding the conductor pipe and is bolted to the iron peg "B". These bands are made in a great variety of designs and must often be laid out in pieces, in order to place the outside miters. Now and then we find these bands made of flat strips as at "C" having the outside miter corners filled in. This is not very satisfactory, as these outside corners always show up and are difficult to place so they will not be noticed. Care must be taken to add laps wherever necessary and to solder all curved miters thoroughly after which place a narrow metal strip over the miter on the inside and resolder that.

ENLARGES BRANCH WAREHOUSE.

The extensive increase in its business throughout the Cleveland, Ohio, territory, has made it necessary for Merchant and Evans Company of Philadelphia, Pennsylvania, to lease the two-story building located at 410 Champlain Avenue, Cleveland, Ohio, as an addition to its present warehouse at 315-317 Champlain Avenue. The leased structure will be used for additional stock for the tinner's trade in a large and well-assorted stock of galvanized and black steel sheets, conductor and eave trough, sheet copper, and miscellaneous goods.

DECIDES ON STANDARD TIN ROOFING.

In a preliminary report of the Tin Roofing Committee of the Roofing Metal and Heating Engineers of Philadelphia, Pennsylvania, a plan was outlined for standardizing tin roofing. As published in the July 19, 1919, issue of AMERICAN ARTISAN AND HARDWARE RECORD, the plan is as follows:

"First: That we adopt as an association standard, one roofing plate with no stamp of coating or any other mark on it except one word, its name.

"Second: That each member of our organization in writing agreed to use this one plate for all his roofing. The plate to have but one price.

"Third: That we advertise this name extensively, individually and collectively.

"Fourth: That the association adopt an association 'tin roofing' specification for repairs and new roofs, with this name.

"Fifth: That we insure our new roofs under an insurance plan at a rate per year, which is plausible and profitable if you will consider the subject and in order to counteract the guarantee of other forms of roofing.

"Sixth: That an inspection committee be appointed with power to decide any dispute and its decision in placing the responsibility for a new roof that does not give satisfaction, is binding, excepting that an appeal can be made to the association, within ten days after the decision is rendered.

"As to the plate to be used, your committee has made and is making tests, and examinations of the plate, which they desire, if you approve, and which shall be manufactured by one manufacturer for this territory, the name to be copyrighted.

"We ask your free discussion on this subject and the committee is ready to answer any questions either here or by mail, that are not clear to you.

"We believe we are on the right 'track' for the expansion of a clean mechanical part of our business, in which we can take pride, and afford us the opportunity to hire, and educate mechanics and apprentices.

"If you decide the course is not correct, we ask that each member suggest two names for the plate.

"You are assured by the Metal Club that you have their support, in these recommendations of your committee."

Since the publication of the above report, the Roofing, Metal and Heating Engineers of Philadelphia have adopted the recommendation of the Tin Roofing Committee. The Monthly Bulletin of the organization for August, 1919, publishes the Committee's final report at follows:

Through the effort of this organization "Nu-Dura-Tin Roofing" will be placed on the Philadelphia market.

This tin plate is made from the specifications made by the roofers of our organization.

It has been tested and tried. It has been laid on roofs in Philadelphia for some time past and has proved to be the "Acme of Perfection" for tin roofing.

It combines the wearing qualities of the old Welsh plates, such as the "Melon" and the "Talbot."

It contains the experience of years of manufacture

and tests by Americans, and if you use it, it will prove the one and only roof worth while.

The name is copyrighted and can only be used in Philadelphia for the present. This organization has brought this about. This organization and the Metal Club, composed of the following jobbing houses, have worked on it for months:

American Tin and Terne Company.
Berger Manufacturing Company
L. D. Berger Company
Carter, Donlevy and Company
Gummey, MacFarland and Company
Hall and Carpenter
Frederick J. Knoedler
Marshall Brothers and Company.
Merchant and Evans Company
W. F. Potts, Son and Company
Riter Brothers and Company.
Whitaker-Glessner Company

If you were asked what roof you prefer to lay or work upon you would immediately say the "tin roof," because it is:

Lightning proof—
Light and clean—
Fire proof—
Prevents stoppage of drains—
It is a mechanical job—
Can be painted any color—

Can easily and quickly be repaired in any kind of weather, and under the Association Insurance Plan, is everlasting.

The Metal Club jobbers will have it on sale. Here is your opportunity to help build up the tin roofing business.

Note the advertising. Talk tin roof—but only the "Nu-Dura-Tin" Roof. Did you get your wagon, auto and shop sign? If not, apply to the Association office.

Here is your opportunity to prove you are a business man and able to see a valuable, lasting business proposition, in which your customer receives a good article, at a fair price, and is taken care of after it is sold.

We need you. You need us. And each man who adds his strength to the number already enrolled to push this plate will make our business that much better and be better respected by the customer and public at large

Every roofing that has been placed on the market has an argument against tin roofing; that it must be painted. Just realize the importance of paint! Folks paint wood-work, garden posts and back shed. Why not the roof? But in order to overcome even the forgetfulness of our customers, we have devised a plan to insure a tin roof. Therefore you should know about our "Nu-Dura-Tin" roof insuring plan.

There is no secret about this new tin and the insurance plan, or our coming advertising campaign. Therefore, whether you are a member of our organization or not, we are always glad to give you any information you may request by applying to our office, 308 Builders' Exchange, 18 to 24 South 7th Street, Philadelphia, Pennsylvania.

OBSERVES HUNDREDTH ANNIVERSARY OF MANUFACTURING COMPANY.

Southington, Connecticut, a thriving little manufacturing town of 6,500 souls, nestling in the shadow of the Ragged Mountains, boasts what is probably the most unusual soldiers' memorial in all the United States. Beginning with the list of 139 revolutionary war heroes, it carries the names of every man Southington has sent to any war in which Uncle Sam has engaged since the American freedom was won. There are 921 names in all, 425 of them representing her contribution to the World War.

The memorial was dedicated on the afternoon of August 30th as a part of the 3-day festivities that jointly marked the welcoming home of Southington's soldier sons, the celebration of the 198th anniversary of the founding of the village, and the centenary of the birth of its leading manufacturing interest, the Peck, Stow and Wilcox Company, makers of hand tools and tinnern's machines. The formal presentation to the village was made by Governor M. H. Holcomb, of Connecticut, on behalf of the Peck, Stow and Wilcox Company, whose gift it was. Governor Holcomb is a director in the company.

The monument is composed of a granite pedestal, approximating in its proportions 5 feet square by 10 feet high, and carrying upon its four sides bronze plates, each 3 x 4 feet, bearing the names of the soldiers, living and dead, who have stood for Southington on the battle fronts of every American war. Surmounting it is a steel flag pole 87 feet in height. Complete it represents an outlay of close to \$10,000. It stands in the village green.

Inspiration for the joint celebration came from Lyman H. Treadway, president of the Peck, Stow and Wilcox Company. The company had already been considering the observance of its centenary when the world war came abruptly to a close. It was expected that the soldier boys would practically all be home by the date of this celebration. Other cities were already talking memorials. Mr. Treadway hit upon the happy idea of a memorial for all Southington's soldier sons. And his associates promptly indorsed the idea. The village authorities in turn agreed to join hands in a civic celebration and homecoming. Plans were made accordingly.

Friday, August 29th, the opening day of the centennial, was given over to an old-fashioned community basket picnic at Lake Compounce, a summer resort near Southington. In the evening there were fireworks and a band concert on the village green. In the afternoon Mr. Treadway presented every employe with a service badge. Twenty-three who had been in the company's employ more than 40 years were given gold badges. Five of these had been 50 years on the company's pay roll. Fifty-three who had been in service 25 years or more were given sterling silver badges, and all others, down to the 4 year men, were given bronze badges. Each was inscribed with the name and service record of the recipient.

The unveiling and presentation of the monument on Saturday afternoon followed the parade of returned soldiers and sailors, various military and fra-

ternal units and an elaborate pageant commemorating the development of manufacturing in the Connecticut hardware belt and incidentally emphasizing local historical events. A feature in this connection was the museum of family heirlooms, contributed articles of historical interest, and a surprising array of early hand-made tools. A reception to the public by officers and directors of the Peck, Stow and Wilcox Company and a community dance in the newly added 5-story addition to the plant completed the day's program in Southington. President Treadway was later toastmaster at a banquet to the officers and directors at the Hartford Club. The program ended Sunday with a union Thanksgiving service, participated in by the clergymen and congregations of all the local churches on the village green, followed by community singing and a sacred band concert.

The Peck, Stow and Wilcox Company is distributing to the trade a handsome illustrated de luxe brochure entitled "One Hundred Years of Progress," which sets down, briefly and entertainingly, the history of the company since 1819. The concern is the fruit of the consolidation, in 1870, under the present name, of the Peck-Smith Manufacturing Company of Southington, which traced its lineage back to Seth Peck, who patented in 1819 the first machine for making tinware; of the S. Stow Manufacturing Company, which had its beginnings in Plantsville, Connecticut, in 1834, through the enterprise of Solomon Stow; and of the Roys and Wilcox Company, which dates back to East Berlin, Connecticut, in 1840. Samuel C. Wilcox was president of the Roys and Wilcox Company at the time of the consolidation.

Besides Mr. Treadway, the officers of Peck, Stow and Wilcox are L. E. Fichthorn, vice-president, and E. N. Walkley, secretary-treasurer.

NATIONAL SCHOOL HAS NEW COURSES AND CHANGES NAME ACCORDINGLY.

The National School of St. Louis, Missouri, is an institution which is known throughout the country for the great advantages it offers to its students. This school is now called the St. Louis Technical Institute and offers special courses particularly on pattern cutting, heating and ventilating engineering and coppersmithing. It has special studies for country town tinnerns in automobile repairing, outside jobbing, plumbing, steam and hot water heating, mensuration and plan reading and sheet metal workers will find it to their advantage to write for full particulars of this course. The heating and ventilating engineering studies include theory and practice of air, fan heating systems, flow of air, velocity of air, practical calculations, designing systems, engineering work, hot water and hot air heating, etc. The coppersmithing course involves the laying out of all manner of fittings and finishing, especially for second and third class workers to become first class workers in a few months; and tells how to treat copper, marine work, etc. The St. Louis Technical Institute also offers boiler maker studies, general sheet metal studies, steel ship building studies and advanced pipe studies and any inquiry addressed to the St. Louis Technical In-

stitute, St. Louis, Missouri, of which O. W. Kothe is the principal, is sure to receive prompt attention.

GETS OUT ILLUSTRATED CATALOGUE.

The Merchant and Evans Company of Philadelphia, Pennsylvania, has just issued a new catalogue showing the Evans "Almetl" Fire Doors and Shutters. It is a twenty-five page booklet, profusely illustrated, giving the various specifications and descriptions of fire doors and shutters in general. This catalogue gives much general information about related products and should be in the hands of all sheet metal workers. It is really a text-book and those that have it in their possession find it a great help at all times. For a copy of this instructive catalogue, address the Merchant and Evans Company, Philadelphia, Pennsylvania.

PRODUCES A GOOD SOLDERING FLUID.

A good soldering fluid is in demand by sheet metal workers at all times and mechanics can make no mistake by using the Asp Non-Acid Soldering Fluid. This can be used for all purposes except aluminum and will be found to be very satisfactory. It is manufactured by the Alfred Spice Process at 68 North Second Street, Philadelphia, Pennsylvania. The Company also makes paste-salt and liquid and those interested should address that Company for further particulars and prices.

RECEIVES MANY RESPONSES.

TO AMERICAN ARTISAN AND HARDWARE RECORD:

Kindly cancel our advertisement for a tinner. We received a good number of responses and secured an excellent workman from among the many applicants. Your want ads certainly get results. Yours truly,

HAY BROTHERS.

Iowa Falls, Iowa, August 25, 1919.

ASKS WHO MAKES GALVANIZED IRON WITHOUT FLAKES.

TO AMERICAN ARTISAN AND HARDWARE RECORD:

Can you tell us who makes a tight coated galvanized iron without flakes?

H. CHRISTENSEN MANUFACTURING COMPANY.

Fort Atkinson, Wisconsin, August 27, 1919.

NOTES AND QUERIES.

Novelty Oil Cook Stove.

From Robert Pugh, Casselton, North Dakota.

Kindly inform me who makes the Novelty Oil Cook Stove.

Ans.—This is made by the Novelty Manufacturing Company of Jackson, Michigan.

Metal Stencils.

From C. L. Epps, Van Wert, Ohio.

Will you please give me the addresses of some firms that make metal stencils?

Ans.—American Steel and Stamping Company, 122

South Michigan Avenue; Martin and Company, 119 South Clark Street; Meyer and Wenthe, 108 North Dearborn Street; and Universal Stamp and Stencil Works, 200 West South Water Street; all of Chicago, Illinois.

Electric Supplies.

From the People's Hardware Company, Clinton, Missouri.

We would like to know who in Kansas City, St. Louis and Chicago sell electric supplies for wiring homes, etc.

Ans.—Stephens Gas Electric Chandelier Company, and Bailey-Reynolds Chandelier Company; both of Kansas City, Missouri. St. Louis Brass Manufacturing Company, Jefferson and Washington Avenues; and Kraushaar Brass Manufacturing Company, 919 Pine Street; both of St. Louis, Missouri. Illinois Fixture and Electric Supply Company, 54 West Lake Street; Incandescent Supply Company, 64 West Lake Street; and Western Electric Supply Company, 30-32 West Lake Street; all of Chicago, Illinois.

Bright Tin Plate.

From Clinton Manufacturing Company, Clinton, Wisconsin.

Can you tell us where to get bright tin plate?

Ans.—American Sheet and Tin Plate Company, Pittsburgh, Pennsylvania; The Berger Manufacturing Company, Canton, Ohio; Berger Brothers Company, 229-231 Arch Street, Philadelphia, Pennsylvania; Dearborn Steel and Iron Company, 320-328 East North Water Street, Chicago, Illinois; Frederick J. Knoedler, 68 North 2nd Street, Philadelphia, Pennsylvania; Merchant and Evans Company, 347 North Sheldon Street, Chicago, Illinois; Milwaukee Corrugating Company, Milwaukee, Wisconsin; Stark Rolling Mill Company, Canton, Ohio; Tanner and Company, Indianapolis, Indiana; and Whitaker-Glessner Company, Wheeling, West Virginia.

Majestic Fire Place.

From William Clagus, Bethany, Missouri.

Please let me know where I can secure repairs for the Majestic fireplace or grate.

Ans.—This is manufactured by Edwin A. Jackson and Brother, Incorporated, 50 Beekman Street, New York City, and you can secure repairs from this concern.

Ball Cocks.

From Beuret Heating Company, Auburn, Indiana.

Please let us know who makes small ball cocks.

Ans.—The Ahrens and Ott Manufacturing Company, 14 North Peoria Street; Crane Company, 830 South Michigan Avenue; Illinois Malleable Iron Company, 707 Lincoln Avenue; L. Wolff Manufacturing Company, Fulton and Hoyne Avenues; Weil Brothers, Lake and Dearborn Streets; all of Chicago.

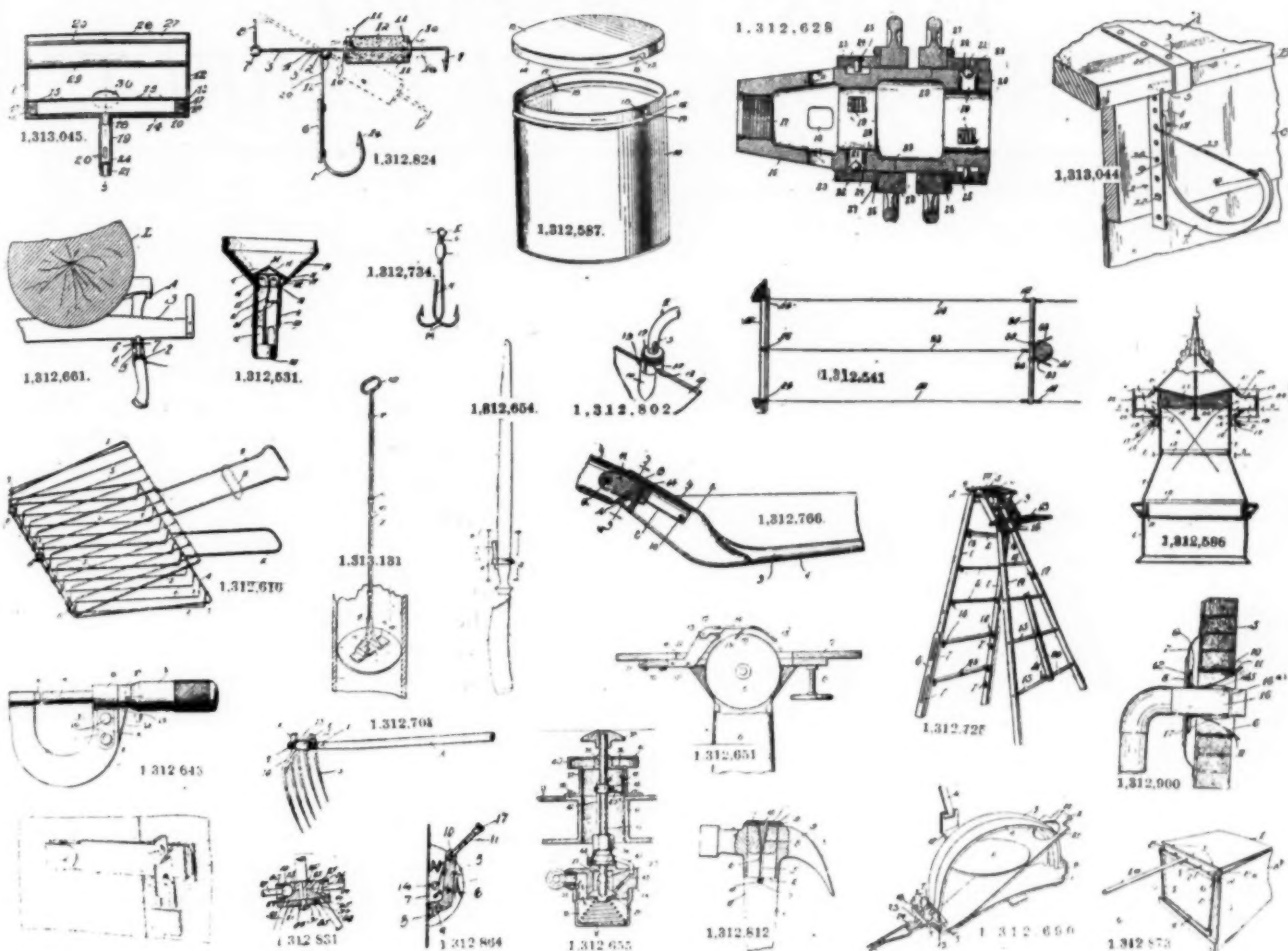
Sheet Metal Power Machinery.

From Samuel A. Spencer, North Temple and West 3rd Street, Salt Lake City, Utah.

Where can I get sheet metal power machinery?

Ans.—Bertsch and Company, Cambridge City, Indiana; Dreis and Krump Manufacturing Company, 2915 South Halsted Street, Chicago; Lennox Throatless Shear Company, Department AA, Marshalltown, Iowa; Friedley-Voshart Company, 733 South Halsted Street, Chicago; Merchant and Evans Company, 347 North Sheldon Street, Chicago; Niagara Machine and Tool Works, Buffalo, New York; and Peck, Stow and Wilcox Company, Cleveland, Ohio.

NEW PATENTS.



1,312,531. Funnel. Theodore W. Garbisch, Carter, Mont. Filed Nov. 22, 1915.

1,312,541. Washline-Support. Ernest Heitman, West Hoboken, N. J. Filed Sept. 14, 1917.

1,312,586. Cupola-Ventilator for Barns and the Like. Herman Silver, Minneapolis, Minn. Filed Nov. 15, 1918.

1,312,587. Can-Closure. Charles J. Sinn and Henry G. Wells, Crisfield, Md. Filed March 11, 1918.

1,312,616. Culinary Device. Arthur E. Cowan, Gloucester, Mass., assignor of one-fourth to Gorham Crosby, Glen Ridge, N. J. Filed March 27, 1916.

1,312,628. Lathe-Chuck. Alfred M. Gydesen, Bridgeport, Conn. Filed March 14, 1918.

1,312,643. Micrometer-Calipers. George W. Poillon, Tarrytown, N. Y. Filed Feb. 11, 1919.

1,312,651. Saw-Guard. Henry F. Walters, Chicago, Ill. Filed July 5, 1918.

1,312,654. Knife-Sharpener. Charlie B. Weaver, Los Angeles, Calif. Filed Aug. 21, 1917.

1,312,655. Valve and Ignition Mechanism for Gas Stoves. James Whalen, Omaha, Nebr. Filed Jan. 28, 1918.

1,312,661. Saw Attachment. Dudley Worden, Ferndale, Wash. Filed Oct. 1, 1917.

1,312,690. Spring-Trap. Holdridge G. Greene, Oneida, N. Y., assignor to Triumph Trap Co., Oneida, N. Y., a corporation of New York. Filed Nov. 23, 1916.

1,312,703. Combination Hay and Manure Hook. Henry Mattson and Edward Mattson, Hutchinson, Minn. Filed April 7, 1919.

1,312,725. Step-Ladder. Joseph Hormisdas Gagnier, Fall River, Mass. Filed May 2, 1918.

1,312,734. Fishhook. Jacob Jones, Ringling, Mont., assignor of one-half to Tillie Theis, Butte, Mont. Filed March 15, 1919.

1,312,766. Shovel, Scoop, Etc. John S. Surbaugh, Vincennes, Ind. Filed March 7, 1918.

1,312,802. Convertible Self-Grinding Hoe. Alexander Norris, Dexter City, Ohio. Filed Aug. 6, 1918.

1,312,812. Dirigible Headlight. Jesse F. Spencer, Toppenish, Wash. Filed May 18, 1918.

1,312,824. Fishhook. Henry Roman, Tulsa, Okla. Filed Dec. 30, 1918.

1,312,831. Washing-Machine. Clida Chapman, Cherryvale, Kans. Filed Jan. 10, 1918.

1,312,864. Window-Sash Fastener. Henry W. Nelson, Ashby, Minn. Filed March 27, 1919.

1,312,873. Crate-Opener. Thurman Allen Rhodes, Altamont, Ill. Filed Sept. 19, 1918.

1,312,900. Stovepipe-Collar Holder. Michael J. Faisti, Columbus, Ohio. Filed Jan. 31, 1916.

1,312,931. Combination Latch Hasp and Staple. William N. Tenny and Clarence J. Tenny, Sherman, Calif. Filed May 10, 1919.

1,313,044. Eaves-Trough Hanger. Albin John Anderson, Kings Park, N. Y. Filed Sept. 6, 1917.

1,313,045. Gas-Heater. Carl P. Anderson, Jamestown, N. Y. Filed March 22, 1919.

1,313,131. Furnace-Flue Cleaner. John Soderquist, Beloit, Wis. Filed April 17, 1919.

ORIGINATES A PATRIOTIC WORK.

Many cities with foreign born residents will be interested in the plan of Boston which has an organization known as the Citizens' Public Celebration Association, 1912-1919. This association is an organization of citizens cooperating with the city in planning and execution of arrangements for public holidays for the purpose of giving to each anniversary a meaning and a value which will stimulate patriotism by increasing familiarity with local and national history.

WEEKLY REPORT OF TRADE AND THE MARKETS

DIMINISHING OF STEEL PRODUCTION IS CAUSED BY LABOR SITUATION.

Advices from Pittsburgh are to the effect that considerable new business has been refused by steel producers because of the labor outlook. There is no question of steel mills having oversold their capacity; it is just the cautious view taken of the future which is curtailing production.

So far the strike trouble has been mostly labor threats by union organizers, for the producers have maintained a waiting policy designed to force the union leaders' hands, although in a few places trouble has occurred. For instance, a steel plant in Peoria has just finished a strike where the men were out for a 12 per cent increase, the settlement being a compromise on a basis of 5 per cent increase. It is reported also that three sheet mills in Wheeling, Canton and Newport, Pennsylvania, have been closed and it is also said the spirit of unrest has invaded other plants, which, however, are still operating. This has resulted in less efficient work by the men.

Conditions are resulting in smaller production, but, on the other hand, sheet steel is meeting with a tremendous demand and buyers who have not established connections with mills are a bit out of luck in the matter of supplies, for most of the mills are only attempting to supply their old customers, and in many instances are forced to scale down orders and allot just so much to each consumer.

Most of the mills are operating around 90 per cent of capacity and there are few plants not operating except those affected by labor troubles and a few in need of repairs.

STEEL.

While the balance of probability is that there will be no important strikes either in the steel industry or on the railroads, many consumers of steel have acted on the rumors that there might be trouble and have been calling for particularly heavy deliveries, with the result that they have a more or less comfortable leeway in the matter of steel supplies. Producers have been glad to cooperate with consumers in this matter and have been ready to ship as much steel as they could, even though it did not appear that buyers needed all the steel they asked for. These observations apply particularly to regular mill customers. The chance or occasional buyer has for two or three weeks experienced much difficulty in placing orders and at the present time it is impossible for one to buy much steel unless he has a regular and well established mill connection.

Some of the mills are practically out of the market, not because they are oversold against their full capacity but because they have been following a policy of

booking only such tonnage as it seemed probable they would be able to deliver without any difficulty.

COPPER.

Business in copper has fallen off lately, and irregular and desultory changes have been marked features of the situation during the first half of the current month. Considerable price depression, both in the domestic and London markets, followed the recent adverse developments in financial and labor circles.

Strike talk which would affect the transportation of the country, and the drastic decline in securities, have acted as a check on copper market activity. There has been a lull in copper buying in consequence of the disturbing factors referred to, but the curtailment in trading operations is not surprising under present circumstances. Although the market has proved a dull proposition for the past several weeks there is every reason to regard this condition as a mere temporary episode in the copper situation.

The heavy trading in June and July gave indication of the remarkable recovery in trade and sentiment. Previous thereto the large holdings of copper in primary hands were looked upon as a weight hanging over the market. But when the expanding needs of consumption were carefully studied and appreciated it was felt that a world demand will be able to gradually absorb all the supplies available.

The influence chiefly responsible for the depression in the copper market during the past six or eight months is the tremendous advance in construction costs. Currency inflation and the payment of unnecessarily high wages during the war, together with the shortage of food supplies all over the world, have operated together to raise the cost of building so high that business men and investors have been afraid to go ahead with the work of carrying out the extensive construction undertakings which they previously had planned.

No change has occurred in the price of sheet copper in the Chicago market, the figures remaining at 33½ cents per pound.

TIN.

Heavy arrivals this current month, amounting so far to 4,120 tons, have just begun to depress values, and, with further shipments due during September, cheaper tin seems to be out of the question, if the demand does not materially improve. Bolivian tin, in consequence of the decline in Straits, was also offered lower at 54 cents for August delivery. Shipments of Straits for the balance of the year are quoted in the range from 54 to 56 cents. The London market continues highly irregular and the speculative char-

acter is evidenced by various ups and downs, for which no explanations are given.

The Chicago market for pig tin has declined from 71½ cents per pound to 60 cents per pound and bar tin is quoted at 61 cents per pound.

LEAD.

The lead market is somewhat firmer than it was last week. The improvement appears to be gradual, but slow in bridging the gap between producers' prices and the outside market.

SOLDER.

A fractional increase has taken place in Commercial and Plumbers' solder in the Chicago market. Warranted, 50-50, remains the same at 37.5 cents per pound. Commercial 45-55 has increased in price from 34.2 cents per pound to 34.5 cents per pound, and Plumbers' from 30.9 cents per pound to 31.4 cents per pound.

ZINC.

The zinc market, though dull, remains firm. At 7.60 cents to 7.65 cents basis East St. Louis there was a limited tonnage offered by producers for early positions, but these are not pressed for sale, bids of a shade less being refused by them. The outside market also holds strong, apparently very small stocks for August remaining in dealers' hands for sale. As regards September it is probable that more speculative lots may come out than are at present in evidence, but for this month also the buying of the past few weeks, while producers were entirely aloof, has cleaned up a large proportion of the metal available outside of producers' hands.

The demand, however, is very light, and the course of the market depends mainly on how long producers can maintain their attitude. Their heavy bookings have carried them fairly well through the third quarter. During the past month some of them sustained loss of output on account of embargoes that reduced their ore supply. The ore shipments are proceeding more satisfactorily, but it is not thought that ore conditions, affected by high and scarce labor are such as to lead the situation to any lower basis of price yet. Ore prices have been following the zinc market rather than leading it, and hold firm at figures unchanged.

Sheet zinc in Chicago is selling at 13 cents per pound in cask lots and from 13¼ to 13½ cents per pound in less than cask lots.

SHEETS.

From Pittsburgh comes the report that about 90 per cent of the sheet mills are in operation and are making practically normal tonnages for this time of year, when the weather always cuts the output to somewhat below the year's average.

Demand for sheets has been heavy all along the line for several weeks past. A part of the insistence of customers for deliveries is probably due to rumors circulated that there might be restriction of production by labor troubles and another part is due to fears that there will be transportation difficulties later. Sheet mills consider it improbable that there will be any

general labor troubles, but should there be consumers will probably be found to be quite comfortably stocked. There have been sporadic labor outbreaks at sheet mills in the past fortnight but they do not have the semblance of being general in their character nor do they seem to be related to each other. Rather indeed they seem to run counter to the effort the American Federation of Labor has been making to organize the steel industry, for if the men at these plants were in relation to the general movement they would not go off at half cock.

Intelligent sheet manufacturers regard it as highly undesirable that there should be any price advances at this time, while of course there is no disposition in any quarter to make concessions, so that the sheet market is quotable firm and steady at regular prices.

NAILS.

There seems to be a general disinclination among leading wire-nail manufacturers to the booking of any new business at present prices, and so general has this attitude become that buyers are now really scurrying around in an effort to have their needs taken care of. The leading interests are booking such orders as they care to accept at the regular schedule prices, but independent interests are holding out for and securing a price of some \$5.00 higher on wire nails and \$2.00 higher on other wire products.

TIN PLATE.

The tin plate mills are decidedly reluctant about selling. One large Pittsburgh interest is indisposed to sell for fourth quarter, while others are moderately well sold up for that quarter. In most instances delivery promises already made are such that business entered now would have to take its turn and some mills could not make any shipment against a new order until December.

In the Chicago market, first quality bright tin plates 14 x 20 are quoted at \$13.20 per box of 112 sheets and other gages and sizes at corresponding prices.

OLD METALS.

Wholesale quotations in the Chicago district which may be considered nominal are as follows: Old steel axles, \$27.00 to \$28.00; old iron axles, \$20.50 to \$30.00; steel springs, \$20.00 to \$20.50; No. 1 wrought iron, \$19.75 to \$20.25; No. 1 cast, \$24.50 to \$25.00, all net tons. Prices for non-ferrous metals are as follows, per pound: Light copper, 15½ to 16 cents; light brass, 10½ to 10¾ cents; lead, 4¾ to 5 cents; zinc, 5 to 5¼ cents; cast aluminum, 24 to 25 cents.

PIG IRON.

Virtually all consumers of foundry, forge and malleable iron now have well provided for their requirements over the remainder of the year and only a few holes remain to be filled on the sheetmaking grades. In iron for next year consumers, as well as producers, are following a more conservative policy, caused by unrest in labor. The rising tendency in coke probably will force the price of iron higher, and the uncertainty about the production cost for next year is restricting booking of orders for late delivery.

Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

METALS.		LEAD.		Broad.		BEATERS.	
PIG IRON.		American Pig.....\$6 25		Plumbs, West, Pat.....List		Carpel. Per doz.	
Basic.....\$25 50		Bar.....6 75		" Can. Pat.....\$69 00		No. 7 Tinned Spring Wire...\$1 10	
Northern Fdy., No. 2....26 75		Sheet.		" Fire.en's (handed). 21 00		No. 8 Spring Wire coppered...1 50	
Southern Fdy., No. 2....30 00		Full coils.....per 100 lbs. \$8 75		Prices		No. 9 Preston.....1 75	
Lake Sup. Charcoal....31 45		Cut coils.....per 100 lbs. 9 00		Single Bitted (without handles).		Egg. Per doz.	
Malleable.....27 25		TIN.		Warren Silver Steel.. on application		No. 50 Imp. Dover\$1 10	
FIRST QUALITY BRIGHT		Pig tin.....71 1/2 c		Warren Blue Finished. "		No. 102 " " tinned...1 35	
TIN PLATES.		Bar tin.....78 1/2 c		Matchless Red Pole.....\$11 50		No. 150 " " hotel...2 10	
IC 14x20.....112 sheets Per box		ADZES.		Double Bitted (without handles).		No. 10 Heavy hotel tinned...2 10	
IX 14x20.....14 63		Carpenters'.		Warren's Natl. Blue, 3 1/2 to 4 1/2		No. 13 " " " 3 30	
IXX 14x20.....16 30		Plumbs.....Net		lb..... Prices on application		No. 15 " " " 3 60	
IXXX 14x20.....17 50		Coopers'.		The above prices on axes of 3 to 4 lbs.		No. 18 " " " 4 50	
IXXXX 14x20.....18 70		Barton's.....Net		are the base prices.		Hand. 8 9 10 12	
IC 20x28.....26 40		White's.....Net		BAGS, PAPER NAIL.		Per doz.\$11 50 13 00 14 75 18 00	
IX 20x28.....29 25		Railroad.		Pounds..... 10 16 20 25		Moulders'.	
IXX 20x28.....32 60		Plumbs.....Net		Per 1,000.....\$5 00 6 50 7 50 9 00		12-inch.....Per doz. 20 00	
IXXX 20x28.....35 00		AMMUNITION.		BALANCES, SPRING.		BELLS.	
IXXXX 20x28.....37 40		Peters Cartridges.		Pelouze.....20%		Call.	
Cokes, 180 lbs.....20x28 \$16 00		Semi-Smokeless.....Less 10-7 1/2%		BARS, CROW.		3-inch Nickeled Rotary Bell,	
Cokes, 200 lbs.....20x28 16 20		Smokeless.....Less 10-7 1/2%		Pinch or Wedge Point, per cwt....\$8 50		Bronzed base.....per doz. \$5 50	
Cokes, 214 lbs.....IC 20x28 16 60		Shells, Loaded, Peters.		BASKETS.		Cow.	
Cokes, 270 lbs.....IX 20x28 18 50		Loaded with Black Powder. Less 15%		Small Willow.....per doz. 15 00		Kentucky.....30%	
BLUE ANNEALED SHEETS.		Loaded with Smokeless Powder,		Medium Willow....." 17 00		Door. Per doz.	
No. 10.....per 100 lbs. \$4 57		medium grades.....Less 15%		Large Willow....." 20 00		New Departure Automatic...\$ 7 50	
No. 12.....per 100 lbs. 4 62		Loaded with Smokeless Powder,		Galvanized Steel. 1/2 bu. 1 bu. 1 1/2 bu.		Rotary.	
No. 14.....per 100 lbs. 4 67		high grade.....Less 15%		Per doz.....\$11 50 \$17 00 \$22 00		3-in. Old Copper Bell6 00	
No. 16.....per 100 lbs. 4 77		Winchester.		AUGERS		3-in. Old Copper Bell, fancy. 8 00	
ONE PASS COLD ROLLED BLACK.		Smokeless Repeater Grade.. 10&5%		Boring Machine.....60%		3-in. Nickeled Steel Bell....6 00	
No. 18-20.....per 100 lbs. \$5 42		Smokeless Leader Grade.... 10&5%		Irwin's.....25%		3 1/2-in. Nickeled Steel Bell...6 50	
No. 22-24.....per 100 lbs. 5 47		Black Powder.....10&5%		Carpenter's Nut.....50%		Hand.	
No. 26.....per 100 lbs. 5 52		U. M. C.		Hollow.		Hand Bells, polished.....15%	
No. 27.....per 100 lbs. 5 57		Nitro Club.....10&5%		Bonney's.....per doz. 30 00		White Metal.....15%	
No. 28.....per 100 lbs. 5 62		Arrow.....10&5%		Stearns, No. 0.....43 25		Nickel Plated.....10%	
No. 29.....per 100 lbs. 5 67		New Club.....10&5%		No. 1.....43 25		Swiss.....15%	
GALVANIZED.		Gun Wads—per 1000.		No. 2.....43 25		Silver Chime.....10%	
No. 16.....per 100 lbs. \$6 22		Winchester 7-8 gauge.....\$2 25		No. 3.....42 00		Miscellaneous.	
No. 18-20.....per 100 lbs. 6 37		" 9-10 gauge.....1 94		No. 4.....10 50		Church and School, steel alloys...30%	
No. 22-24.....per 100 lbs. 6 52		" 11-28 gauge.....1 63		No. 30.....45 00		Farm, lbs. 40 50 75 100	
No. 26.....per 100 lbs. 6 67		Powder. Each		No. 33.....45 00		Each.....\$3 00 3 75 5 50 7 25	
No. 27.....per 100 lbs. 6 82		DuPont's Sporting, kegs.....\$11 25		No. 50.....48 00		BEVELS, TEE.	
No. 28.....per 100 lbs. 6 97		" " 1/2 kegs.....3 10		No. 55.....45 00		Stanley's rosewood handle, new	
No. 30.....per 100 lbs. 7 47		DuPont's Canisters, 1-lb.....56		No. 60.....42 00		list.....Net	
WELLSVILLE POLISHED STEEL.		" " 1-lb.....22		BINDING CLOTH.		Stanley's iron handle.....Net	
No. 18-20.....per 100 lbs. \$7 10		" Smokeless, drums.....43 50		Zincd.....35%			
No. 22-24.....per 100 lbs. 7 20		" " 1/2 kegs.....11 25		Brass.....40%			
No. 26.....per 100 lbs. 7 30		" " 1-lb.....22		Brass, plated.....60%			
No. 27.....per 100 lbs. 7 40		" " 1-lb.....22		BITS.			
No. 28.....per 100 lbs. 7 50		" " 1-lb.....22		Auger.			
KEYSTONE HAMMERED		" " 1-lb. canisters.....56		Jennings Pattern.....20%			
POLISHED STEEL.		" " 1-lb. canisters.....56		Ford Car.....List plus 5%			
28-26.....per 100 lbs. \$9 85		" " 1-lb. canisters.....56		Ford's Ship.....35%			
24-22.....per 100 lbs. 9 35		Hercules "E.C." and "Infallible"		Irwin.....15%			
BAR SOLDER.		50 can drums.....43 50		Russell Jennings.....33 1/2%			
Warranted, 50-50.....per lb. 37 50		Hercules "E. C." kegs.....22 50		Clark's Expansive.....33 1/2%			
Commercial, 45-55....." 34 20		Hercules "E. C." 1/2-kegs.....11 25		Steer's " Small list, \$22 00.....5%			
Plumbers'....." 30 90		Hercules "E. C." 1-lb. kegs.....11 25		" Large " \$26 00.....5%			
ZINC.		Hercules "Infallible," 25 can		Irwin Car.....35%			
In slabs.....8 1/2 c		drums.....22 00		Ford's Ship Auger pattern			
SHEET ZINC.		Hercules "Infallible," 10 can		Car.....List plus 5%			
Cask lots.....13 c		drums.....9 00		Center.....10%			
Less than cask lots.....13 1/2 to 13 3/4 c		Hercules "E. C." 1/2-kegs.....5 75		Countersink.			
COPPER.		Hercules "E.C." and "Infallible"		No. 18 Wheeler's.....per doz. \$2 25			
Copper Sheet, base.....33 1/2 c		canisters.....1 00		No. 20.....3 00			
		Hercules W. A. .30 Cal. Rifle,		American Snailhead.....1 75			
		canisters.....1 25		Rose.....2 00			
		Hercules Lightning Rifle,		Flat.....1 40			
		canisters.....1 25		Mahew's Flat.....1 60			
		Hercules Sharpshooter Rifle,		Snail.....1 90			
		canisters.....1 25		Dowel.			
		Hercules Unique Rifle, canisters		Russell Jennings.....15%			
		1 50		Gimlet.			
		Hercules Bullseye Revolver,		Standard Double Cut.			
		canisters.....1 00		Doz. \$1 10—\$1 60			
		ANVILS.		Countersink.....Doz. 1 80			
		Trenton, 70 to 80 lbs.....9 1/2 c per lb.		Reamer.			
		Trenton, 81 to 150 lbs.....9 1/2 c per lb.		Standard Square.....Doz. 2 50			
		ASBESTOS.		American Octagon.....2 50			
		Board and Paper, upto 1/16" 17c per lb.		Screw Driver.			
		Thicker.....18c per lb.		No. 1 Common....." 1 40			
		AXES.		No. 26 Stanley.....1 75			
		Boys' Handled.					
		Niagara.....12 50					